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ABSTRACT

This booklet is a compilation of articles written by educators to describe the qualities of a "meaningful" kindergarten experience. The authors present the unique characteristics of 5-year-olds, the importance of kindergarten, and the relationship of kindergarten to other school experiences. Topics discussed range from teacher-pupil ratio and outdoor space to the role of the paraprofessional. (SET)

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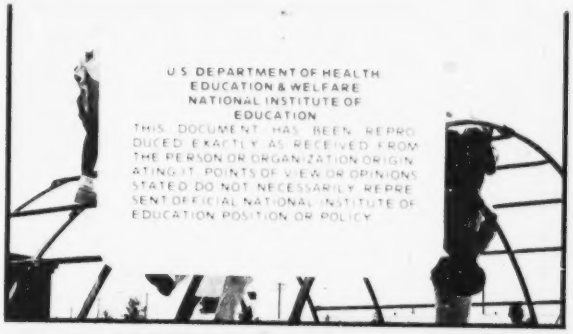

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KINDERGARTEN EDUCATION

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INTRODUCTION

Dear Teacher
Principal
Superintendent
School Board Member
Parent:

If you are interested in kindergartners—if you are interested in understanding the goals and purposes of the kindergarten—if you are considering the addition of kindergarten in your school system—this bulletin was written for you.

Since the first public school kindergarten was established in St. Louis in 1873, the education of the young child has had its ups and downs. Often the last educational "innovation" to arrive in a school system, the kindergarten has also been the first "frill" to be dropped by the board of education when times got tough and millages failed to pass.

Yet this "frill" persistently refuses to die. For some reason the child likes kindergarten, and the parent says "something good" happens there. The first-grade teacher reports that the child "performs and adjusts" better. The kindergarten teacher reports that the "experience is meaningful."

Although everyone has felt that kindergarten is "something good," a clear articulation of the goals and purposes has not always been forthcoming. This bulletin makes clear exactly what constitutes a "meaningful experience" in kindergarten. The authors vividly describe five-year-olds and the unique characteristics of this age. They show why kindergarten is important and how it relates to other school experiences.

This bulletin includes discussions ranging from teacher-pupil ratio and outdoor space to the interrelatedness of other disciplines and the role of the paraprofessional—

also called auxiliary personnel or teacher's aides. After reading Hymes' article, no parent or administrator will be content to have a kindergarten in name only.

The timing of this bulletin is particularly appropriate. With the recent interest on programs for young children, many "specialists" have arisen to tell us that there is only *one* approach to these children—and then quickly provide us with the *magical answer*. However, as Bernice Fleiss points out in this bulletin, "The curriculum of the kindergarten offers as much variety as a college catalog."

In exploring the various functions of the kindergarten, the authors show us how the teacher is involved in helping the child to develop social skills, to develop an adequate self-concept, to be inquisitive (that is, to hypothesize, investigate, experiment, and draw conclusions and generalizations), to abstract, and to conceptualize. To date, no research indicates a one best way to teach children these things. However, research does suggest that children working with sensitive teachers, consistent teachers, curious teachers who encourage questioning and who themselves question—research does suggest that under these conditions children can make gains in many areas. This bulletin provides a sound base to show the conditions under which optimal learning can be accomplished with the kindergarten child.

THE KINDERGARTEN CHILD

THE MICROCOSM that is kindergarten contains as many different five-year-olds as there are children in the class. Yet it is necessary to generalize—remembering that each child is a unique individual and, at the same time, recognizing that similarities exist among most kindergarten children the world over. They learn best by doing; they are physically active, spontaneous, exploring, growing in competency and independence, and hungry for companionship. Growth proceeds in the same sequence for all children, but each child is not at the same stage at the same time during the kindergarten year.

Some children have no brothers or sisters, but others have several siblings; some live in favored communities, while others come from depressed rural or urban areas; some have mothers who work; some have been to nursery schools or day-care centers; some have no fathers in the home. By the time the child comes to kindergarten, he has had many different experiences and has already learned many things: some know how to cope with the exigencies of life in a slum and are suspicious of adults; some have never been allowed to leave their own backyards. But each child is developing physically, socially, emotionally, and intellectually at his own rate.

Five-year-olds can vary as much as 10 inches in height and 15 pounds in weight; there are wide differences in their interests and performance, in their language development, and in their social and emotional adjustment to kindergarten.

The Kindergartner Is an Avid Learner

The flexibility of the kindergarten program recognizes the variety of abilities and personalities of five-year-olds, who may be together in a large social group for the first time. This is the year in school when children really begin to take responsibility for their own behavior—when they develop new skills in thinking, speaking, and handling materials, while learning to interact with new children and adults. Because there is such variability in personality and maturation, there must be ample space, time, equipment, and play materials for each child in the group to develop in his own way.

Five-year-olds need time to explore their world and to try things out at their own pace. These children learn much from play; to them it is serious business. Piaget emphasizes this quality, calling symbolic child's play "egocentric thought" in its pure state. Just watch young children at play, figuring out or talking out how to do things. The activity may be block building, with children puzzling how to keep a tall tower from toppling over; it may be a group in the doll corner arguing about their roles; it may be one child picking up objects with a magnet, creating a design with colored pegs, or painting at an easel.

The time devoted to personal investigation of one sort or another in kindergarten is well spent, for it represents the construction of thinking and organizing, the modifying of the kindergartner's concepts. He refines his ideas about the world of things, people, and experiences by comparing, matching, and relating. Nearly all one's social and intellectual concepts are formed at this age; these will be modified, clarified, and extended as the child grows older and enters the stage of logical thinking.

The child learns best by touching, tasting, smelling, seeing, and hearing. He is developing symbolic processes as he translates experiences in a sensory-motor way through drawing, painting, the dance, music, and dramatization. He is learning to use words as he expresses the rudimentary concepts of space and time, sequence and change. He searches for words to make inquiries, gather information, hypothesize, test, and reason. In turn, his firsthand experiences build his vocabulary. He gains self-knowledge about age and sex in relation to others, the children and the teacher, as well as to his own family. His attitudes toward success and failure, toward learning, and toward adults whom he can trust are constantly being built.

A Young Child's Interest

It is often difficult to predict what will engage the kindergartner's interest, for his total development and what he has experienced at home will influence what he does in school. Children who live in high buildings often may not play outside, and their indoor play is circumscribed by the noise or messiness involved. This is why unhurried free play with really free choice of activity is absolutely necessary for the child in school. He may wander about the room, looking at various objects under a magnifying glass. He may work busily with others at tables, using scissors, paste, and crayons or putting together an intricate puzzle. He may look at books, listen to records, build with blocks, or hammer at a workbench. During free play he is learning much in all the many curriculum areas. In fact, the curriculum of the kindergarten has been said to offer as much variety as a college catalog, and this is essential if we expect to meet the needs of the individuals in attendance.

The kindergartner likes to ride a tricycle and climb quite high, for his large muscles are developed and he likes to use them. He really enjoys play—play with blocks; building houses, bridges, airports, and rocket ships; play with dolls and dress-up clothes. Young children like to cut, paste, and paint just for the pleasure of the activity; and they often become more involved in the process than the product. When adults ask, "What is it?" the young child hasn't always decided, which is why it's better to say, "Tell me about it." Then he can say, "It's a painting" if that's all it is to him.

At this age there is interest in books and reading, but usually the kindergartner cannot read yet. Therefore, he likes to hear stories told and retold many times and enjoys humorous tales and poems about his everyday world. Each is busy making his own familiar environment, the world he has just discovered, more familiar. In-school experiences reinforce the out-of-school observations.

The Kindergartner Is Self-Oriented

A young child tends to be realistic, very here-and-now oriented and concrete rather

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than abstract. He constantly uses the first person. Listen, and you hear about *him*. He talks about me, now and here. The anecdote is told of a youngster who was asked, "Do dogs run?" His answer was, "I don't have a dog."

Generally, he prefers to play with one or two children rather than a large group, and dramatizing family and home is his most popular activity. Yet, he can participate in large groups for singing, stories, games, or snack time. In his dramatic play he shifts from child, to parent, to policeman, to astronaut, or even to machine. In the Vassar film "A Long Time To Grow" kindergartners are shown digging a deep ditch. One little boy, drawing on his own experience of seeing a steam shovel in operation, pretends he is a steam shovel as he scoops up handsful of earth.

Most five-year-olds like to be helpful and like to do things for themselves—put the record on the record player, feed the fish, water the plants, mop the floor, or scrub the table. He wants to be trusted and given responsibility. Many can find their own names and even write them themselves; if not, they demand that their names be put on any work they have done.

Children like routines and quickly learn how the kindergarten day goes. They will comment to the teacher if the schedule is changed. Yet fives are usually so "now" oriented that they are not always sure how far away Thursday is. They know which day

there's no school or what day comes after Sunday. Their sense of space is also related to themselves. They are able to give directions in the car or bus if the route is one they travel frequently. Because of TV, children seem to know more about events outside of their immediate environment than they ac-

tually do, and they will need corrections of misconceptions.

A Five-Year-Old's Concepts

During early learning, repetition of similar experiences is necessary to develop concepts. A child believes he has more if he breaks his sandwich or his cookie in two. He thinks there's more water in a tall jar than the same water poured into a flat container. For concept development he needs many opportunities to form correct perceptions of size, weight, distance, and balance.

Fives like the sound of words and are themselves very talkative, having a vocabulary of about 2,000 words. They experiment with language and are inventive in their use of words. Because they use so many words, we must not assume their concepts are accurate. Kindergarten children tend to be pragmatists and will often define objects by their use: a horse is to ride, a brush is to paint. They are still learning to classify objects and to understand many meanings for one word. To our TV sophisticates, a *shepherd* may be an astronaut and an *atlas* a missile.

We must recognize the great value of speech as a true means of communication and expression and encourage children to listen as well as talk. Since the power to use language facilitates children's ability to reason, we also must listen and help them check and verify their observations as they learn through mind and body and feelings combined.

Summary

As he gains competence and control over himself, the five-year-old constantly shifts interests and is always eager for information: How does it work? Where does it go? Children need many opportunities to learn cause-and-effect relationships. They make observations and question for endless explanations: "Where did the duck come from?" "From the egg." "And the egg came from a duck and the duck from an egg. Where did the first duck come from?" Fives want to find out.

They do find out if we help them to establish warm, friendly relationships outside of the immediate family; if we help them adjust to group living where they must learn to set limits and to control themselves; if we give them time to be alone to satisfy their insatiable curiosity by mixing paints, cooking simple foods, and creating with blocks, art materials, dress-up clothes, music, or words. In the process of finding out about his world a young child must find out more about himself: How many things he can do, how important he is to others. In other words, he builds his own positive self-image. A child who feels good about himself will make the most of opportunities offered him and will reach out to others as well. He will know himself as a person of controls, skills, and coordination if his teacher nurtures his potential for growth in reasoning, language, independence, competence, curiosity, eagerness for information, fun, and friendliness while he is growing up.

THE GOALS OF KINDERGARTEN EDUCATION

AN OLD ASSUMPTION in educational thinking is that nursery and kindergarten education are usually very good, that primary education is almost as good, that intermediate education slips a little, and that the quality slowly but steadily suffers as one goes on up the educational ladder. And, if there has to be slippage, perhaps this is as it should be. One could wish that the child's first experiences away from home in formal schooling would be exceedingly good; in fact, one could wish that all of his years of schooling would be exceedingly good. But the start, in particular! The first taste, in particular! The first impressions, the crucial beginning: These, above all, should be the very best.

Unfortunately, the old assumption is often wrong and bears no relationship to reality. Too many youngsters have their first taste of planned, conscious education away from home under conditions that leave much to be desired.

Essentials of Kindergarten Education

Sometimes the cause for the too-prevalent, low quality is the lack of trained teachers. The country over we offer little specialized training for teachers of the very young. The usual solution is to require a course or two, added on to the regular requirements for ele-

mentary education. Often, even this minimum requirement is nonexistent. We like to think that children are children are children, that school is school is school. The sad result is that many teachers of fives have no appreciation of their special characteristics. They have no tolerance for their unique ways, no respect for their peculiar strengths.

Many other kindergarten teachers, however, are excellent. From training or intuition or native decency they have no inclination to manipulate youngsters. But their hands are often tied because of overly large class size. This is the single greatest disservice to trained teachers and to children. As a country, we are saying with growing momentum: We want kindergartens for all, but we settle for kindergartens in name only. We are unwilling to pay the price, unwilling to have the class size right for this age. All too often "kindergarten" has become a mob scene, the kind of mass that inexorably means herding, managing, shushing, squelching; a cold impersonalization; a hardening of relationships; a casual quality at the very time there should be closeness.

Kindergartens should be schools for parents and for their young children, but this is "theory" when numbers soar to 54 or 64 or 74. Kindergartens should be schools with the maximum of individualization, but this becomes a hollow phrase as numbers mount. Kindergartens should be centers for activity, a place where children choose, havens for expression, but the press of numbers makes all this just a dream. Most of all, a kindergarten should be a place where a young child, a beginner, feels known; where he feels safe; where he feels free; where he can count on being understood. Many fine teachers are fully prepared to let a child live his fifth year with the decency that year demands, but there simply is no way to make warmth and support and interest and caring reach out meaningfully to crowds. Decent standards dictate that kindergarten be a class of about 20 children, with one paid teacher *and* at least one aide, either paid or unpaid.

Kindergartners are young children. They are social beginners. A good day in school is a day in which most of the time is spent in small subgroups, in clusters of two or three or four, or in just working busily alone. In the small, intimate, personal setting these children will talk freely, they can listen well, they can concentrate. In the personalized eyeball-to-eyeball setting they can learn at their best. The day has to come, and soon, when we begin to take pride in creating the kind of conditions right for this age, so these children can use their power of learning to the fullest. Too often we shortchange our kindergartners and force their teachers to try to teach them in settings that are not right, with tools that are not appropriate.

Trips are essential for kindergarten children. They are important for other ages, too, but at this age they are necessary because these children cannot read. They can learn, but they cannot learn from books. They have to see life firsthand; they have to go out

where life is, where the action is. Yet we keep kindergarten classes housebound and put obstacles in the way of trips and promote the second-rate: Show them a movie. . . . Put up a picture. . . . Talk to them.

An outdoor classroom—a play space thoughtfully equipped and private for each group—is essential for kindergarten. For all ages mastery of the body is an important key to pride, as well as to health. But at this age, body use has a central importance. These youngsters are just getting used to their bodies. Their strength, their speed, their daring, their grace, their coordination: These are among the most basic achievements for the age. Yet, we keep fives cooped in, or we turn them loose on the barren field geared to the games of older ages.

Kindergarten tools for learning are not the "standard" tools: chair, paper, pencil, book. . . . But neither are the tools for learning "standard" for the science class or the shop or the music specialist or the geology student. Each age has its own needs; each field of study its special requirements. Confusion about the goals of kindergarten education is probably the most basic confusion and may well be the root reason why we don't bother to train teachers and why we tie the hands of our trained teachers with masses of children and with meager equipment and facilities.

Why Kindergarten?

We say we want kindergartens, but why do we want them? What do we expect them to do? What will the children gain? How will having kindergartens help all the rest of us? Narrow answers to these questions too often lead us to little efforts—and in the wrong directions.

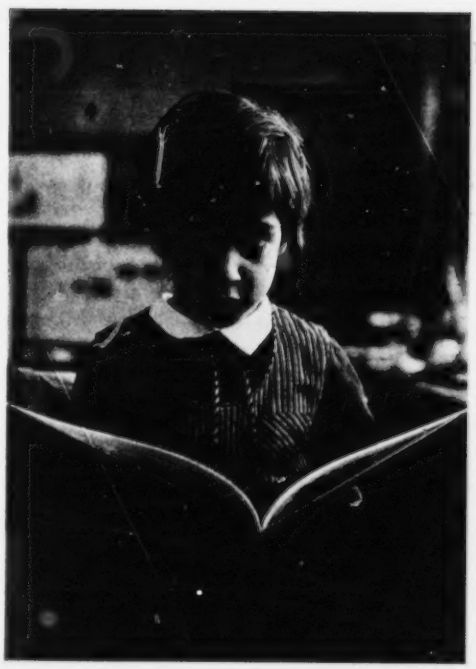
Why kindergarten? Too quickly the answer comes: "To prepare children for the first grade." But if the children are in kindergarten, kindergarten *is* the first grade. And the fifth year of life is as worthy as the sixth year of life. There is no need for "prep" schools, no need for boot camps, certainly no need at this early stage in life to give up today for the sake of tomorrow. "Preparing children for the first grade" is not a reason. First-grade teachers have the same job every teacher faces: to work with the children who come, to work with them as they are. Each grouping has its children and each its job to do. But preparation—breaking them in, getting them ready, softening them up—is not the job of any one grade—not the job of first grade to get them ready for second grade, not the job of kindergarten to get them ready for first. This is a needless, dead-end, and even indecent way of thinking about any year of life.

Why kindergartens? Too quickly the answer comes: "To teach reading readiness." But if the kindergarten is worth its salt, it isn't teaching reading *readiness*—it is teaching reading! It is teaching as much reading as every individual child is ready for, and it is teaching that reading in ways appropriate for that child's development. It is teaching more than reading. It is teaching science—not

science "readiness." And it is teaching mathematics and art and music and the social studies. It is teaching all the fields of human knowledge, as every school of general education must. And if it is a good school, it is teaching them in ways that will make these fields of knowledge important and real and meaningful and useful to its students.

To isolate one area of human experience—reading—and make it the kingpin is to turn the kindergarten away from general, humane, liberal arts education and to change this one early year of life into a narrow, limited, technical "trade school" for young children. To distort this one area of human experience into some utterly artificial, pseudo area of knowledge, "reading readiness," is to open the door to insipid workbooks—anti-intellectual in their content, adult-dominated in their method, narrow and barren in their yield.

Learning to read is a continuous process. All children start on this process long before they come to kindergarten. The language the child speaks is a part of this process. The solid knowledge he has is a part of this process. The skills a child develops in reading are a part of this process. The development of his powers of observation is a part of it. His careful listening. His attention to detail. His interest in ideas. No child ever learns to read in the first grade; he only learns his first-grade's worth. He learns more about reading —and more about science and mathematics and the humanities and the social studies—in the fourth grade and junior high and high school and college. No child starts in kindergarten, nor does his readiness start there either. Each year—each in its own way, each functionally, each appropriately—capitalizes on all the readiness the child has at the time so that he makes the greatest progress he can at the time—and always, if it is general education and not a trade school, making this progress in all the fields of human learning, not in one isolated and set apart.



Why kindergarten? Too quickly the answer comes: "To socialize the child." Sadly this must frequently be translated to mean: To teach him the little ways that will make him easier to live with in first grade. A true, sound, healthy "socialization" is probably one of the greatest needs of the human race. If this were the goal, one could quarrel less with it, although one would have to stress the same reminder that applies to reading: A five-year-old can only learn a five-year-old's worth. But there is no great new humane concern with the quality and satisfaction of our living together. Socialization means "first-grade socialization": raise your hand before talking and don't talk too loud . . . walk on your tiptoes and don't ever run . . . sit quietly in your seat and mind your own business. Too often the worst of first grade—the living that is inappropriate for sixes—seeps down most quickly and is imposed on fives. Be obedient. . . . Be conforming. . . . Don't feel emotion and don't show it if you do. . . . Follow the crowd and stay in line: These are unworthy goals. If sixes really have to learn them to get along, they are frighteningly easy to learn. Clearly, kindergarten does not have to be given over to the likes of this.

But even a broader, more thoughtful concept of the kind of socialization humans need today is not in itself the reason for kindergarten. Productive, constructive socialization may be one of the goals—it cannot be the *only* goal. A good kindergarten seeks to promote the maximum social development of each child. It equally seeks to promote his physical development, his intellectual development, his emotional maturity. It is not a school for one separate slice of the human: the cognitive slice, the physical slice, the social slice. The good kindergarten recognizes the wholeness of human beings and the inevitable, inescapable integration in human behavior of all facets of the person: his knowledge, his feelings about himself and about others, his body, his brain, and his heart.

A good kindergarten is a school. Because it seeks to promote this maximum total development through the school's special province—learning, the job of the kindergarten is the same as the job of all schools—to teach. Its scope is the scope of all schools: to teach in all the fields of human knowledge: the sciences, mathematics, humanities, social sciences, health, and physical education. A kindergarten has a "liberal arts curriculum" but it teaches in a young child's style; its methods are specifically tuned to its students, just as all good schools at all age levels are tuned in on the children and youth they serve.

Goals of Kindergarten Education

We have kindergarten because fives are fully ready to learn, if we will but have the wisdom and the sensitivity to adjust the ways of teaching to fit them. But no good school is concerned with learning for learning's sake. Nor are the liberal arts or the 3 R's or however one wants to categorize human knowl-

edge ends in themselves. Schools work through learning; we work through knowledge. These are our particular approaches, but the goals of a good kindergarten—the ultimate reason why we use these approaches—are something more.

We teach the kindergartner to live this year of his life with more joy, with more meaning, with more purpose, with more satisfaction. We have kindergartens so that the individual youngster can be more glad he is alive during this year of his life. So that he can function with more freedom and ease and zest—being true to himself, using his powers, being his best. The responsibility to the individual is a moral imperative. The joy school brings to his life, the sense of fulfillment, is the prime standard by which to judge a program. This one basic goal sets the pace for the quality of the adult–child relationship, of child-to-child relationships, of space and materials and methods and content. If these do not add up to a tingling sense of vigorous living within the youngster, a fundamental point has been lost, no matter what other gains may seem to show up on any tests.

But schools—kindergartens—are not for the individual alone. Schools are society's insurance policy. We rely on them to ensure that our world will become an ever better place. As we seek to nurture the best quality of the child's living *now*, at this moment in his life, we must simultaneously seek to build those human qualities that make the child good for all of us to live with.

Although we cannot spell out all that we must treasure and nurture and rebuild in each new generation if our living together is to become mutually supporting rather than destructive, we can certainly agree on at least the start of a list of those human qualities we prize: People who know and value freedom . . . those who have a heart and who are generous and caring in their relationships . . . knowing people, wise, informed, curious, in love with the wonder of the world and enchanted with solving its mysteries . . . people who are individualists, who are different, who are a joy to know and work and live with because of their special ways . . . .

The second major goal of kindergarten—from the standpoint of the rest of us, from the standpoint of society—is to have the child begin to breathe in the air of the best of human society, the healthiest form of human association that a teacher's finest dreams can devise.

Summary

A kindergarten is a child's little world—his first step out into the wider world. Kindergarten is a school of general education where children learn their year's worth of all the forms of human knowledge, but they learn it in a setting and in a way and through relationships and to the end that they are moved a little toward those qualities of the human on which the good life itself depends.

READINESS FOR KINDERGARTEN

EDUCATORS HAVE BECOME increasingly aware that the rate of learning during the relatively unplanned preschool years may well surpass that of later, more highly organized school life. The major foundations for all that children will be expected to learn during their school years have most certainly been started by the time they enter kindergarten. The teacher's responsibility is to assess the quality of each pupil's emerging foundations, so that any needed shoring up can be done as early as possible and so that the first year of school life will strengthen rather than undermine a still vulnerable psychological structure.

What form do these foundations take? What informal learnings have occurred at home and around the neighborhood? Grouping the many specific answers to the latter question can suggest a general answer to the former.

Body Skills

Undergirding all aspects of learning is a physical organism—healthy or sick, sound or handicapped, coordinated or awkward, energetic or sluggish, mature or immature, lean or heavy, short or tall. The full range of physical differences among kindergartners is quite

striking. Some can already tie shoestrings, button jackets, make letters, draw straight lines, cut readily with scissors, build towers of blocks, pour water into glasses, use knives and forks properly, and perform other hand skills that require both small-muscle development and eye-hand coordination. Other kindergartners may not do as well even at the end of the year.

In addition to hand skills are many other motor acts that tax various muscle-nerve systems. The lower trunk has already progressed through particular stages of skill development from crawling to standing to walking to running. Some children can at the beginning of the year (and others will develop ability during the year) skip, hop first on one foot and then on the other, kick a ball, and jump rope. Gross motor skills demanding coordinated action from several parts of the body include balancing on a narrow rail, first in walking forward and later, backward; riding a two-wheel bike; catching and throwing balls; climbing fences and jungle gyms; sawing a board in two; pounding nails into a board; and swimming and diving into water.

Even to sit or lie moderately still without wriggling, squirming, or getting up and down can be considered in part a function of the organismic makeup of youngsters. The kindergartner can control and channel his energy for much longer periods of time with considerably fewer random, extraneous body movements than younger children.

For all the above, as well as other numerous body skills, successful performance generally depends on physical maturity and inherited potential and practice opportunities and environmental stimulation. Various indicators of physical maturity show as much as a four-year range of development among kindergartners—some as far advanced in dentition and skeletal structure, for example, as the average seven-year-old, while others only as far as the average three-year-old. The relationship of both physical maturity and body skill to reading and other aspects of development during the early years of school life has been well demonstrated.[1]

One controversial remedial reading program is based on the notion that such body characteristics as handedness (i.e., favoring the same side of the body, either left or right, in various activities such as sighting and writing), crawling patterns, and sleeping posture must be corrected before progress in reading can be expected.[2] Whether or not one accepts the basic premises of this program, one can expect many kindergartners to have learned to favor one hand, eye, leg, and one side of their bodies in much of what they do. Achievement of dominant neural organization seems to be reflected in this consistency

[1] Delacato, Carl H. *The Treatment and Prevention of Reading Problems.* Springfield, Ill.: Charles C. Thomas, 1961; Gore, Lillian L. *A Study of Certain Factors of Growth and the Reading Ability of First-Grade Children.* Doctor s thesis. College Park: University of Maryland, 1954. (Unpublished); Simon, M. D. "Body Configuration and School Readiness." *Child Development* 30: 493-512; 1959.

[2] Delacato, *Op. cit.*

of motor performance. Despite the lack of clearcut evidence of relationship with intellectual accomplishment, it seems advisable to help children develop a moderately consistent use of whichever side of their body seems more dominant. Both home and school provide numerous daily practice opportunities for the development of all sorts of body skills.

Interpersonal Relationships

To date, beginning kindergarten children have already been involved in networks of human interaction with mothers, fathers, grandparents, aunts, uncles, brothers, sisters, cousins, and neighborhood playmates. Ways of relating to people in general and certain types of people in particular are already well entrenched. They have already learned their own special ways of making their wants known to grownups. Some have developed successful techniques for manipulating adults and are used to being catered to. Others have received so little affection or consistent treatment from grownups that they are confused and uncertain of what to expect from any adult; in response, they may be overly rebellious, dependent, or withdrawn in their daily human relationships.

Affection and love from the important people in a small child's life represent the very taproot for the tree of his personality. To the extent that he receives these ingredients, especially during preschool years, to that extent will he be able to give and share affection, recognition, and friendship with others. He can become accepting of others only if he first knows what it means to be accepted. He is free to extend approval to others only if he himself has regularly received approval from people who count.

The young child has also learned much at home about discipline and limit-setting—whether people really mean it when "no" is the answer to a request or whether with repeated asking, especially in a whining manner, the "no" soon becomes a "yes." Just as children learn to respond to "no" in different ways, the meaning of adult phrases develops in a highly personal manner. Similarly, they learn the meaning of a change in vocal tone, facial expressions, and other clues to adults' feelings. The kindergartner probably perceives adult moods much better now than he will later, when with an enlarged vocabulary he can be more responsive to words. Young children communicate beautifully with adults through gazing appealingly, hand holding, pouting, nose-tweeking, and many other nonverbal behaviors. They are past masters at unmasking grownups' false pretensions and sensing their real feelings.

Not only are adult-child patterns of interaction well established by age five, but a considerable backlog of children's experience with other children also generally precedes kindergarten entrance. Close observation of a class early in the year reveals considerable variation in patterns of interaction with classmates. Some children play by themselves; others choose parallel play; and still others

engage in truly cooperative play in group activity. Even emerging peer roles and status are evident. When Billy makes a suggestion, nobody follows it; but when Glenn says something, everyone listens. Active, free-play periods afford good opportunities for noticing the social roles that children have already developed. Many of these patterns are in the process of jelling and will remain as the characteristic manner of relating to other children throughout childhood.

Self-Concept

No aspect of preschool development is more apparent or important than the sense of selfhood. New accomplishments are manifest daily, and with each one comes a slightly greater sense of adequacy than before. For the adult who shows any interest whatsoever, the small child is anxious to demonstrate his newfound skills. Each minor step is accompanied by a "Look at me now" or "See what I can do."

One of the tests of parenthood, or teacher effectiveness for that matter, is continuing to show recognition and enthusiasm for each bit of childhood prowess as it is exhibited in uninhibited, untiring fashion. It is unfortunate that often the adult's, not the child's, attention span is too short when the latter is testing out and extending his new accomplishments. Whether the learning area is motor behavior, vocabulary, numbers, picture recognition, or storytelling, the sense of accomplishment must be communicated. If this zest for learning and extending the sense of "what I can do" were continually recognized and encouraged by the important adults in a child's life, he would never lack for motivation.

The extension of one's feeling of adequacy in knowledge and ability is the most natural motivating force around. At no period in life does it function more clearly than during the years immediately before and concurrent with kindergarten. More than any other species, *homo sapiens* is brought into this world helpless and without built-in instincts for taking care of himself. During his relatively long childhood, he learns those societal patterns necessary for both his survival and his

ultimate contribution to society.

During the preschool years the sense of self becomes an integrating force for all his behavior. It becomes evident in play as the young child tries on various adult roles, e.g., a mother in the doll corner or a fireman on the toy truck. It is equally apparent as the child begins to assume boy or girl roles and mannerisms and to behave in accordance with what his emerging sex identity dictates. In some slum-area kindergartens it shows in the reaction of children to full-length classroom mirrors when they encounter their own mirror images for the first time. Recognizing that children from poor homes often have less opportunity to see pictures of themselves and are less often addressed by their own names than other children, teachers take extra pains to call children by their real names, label all work with the names of the children doing it, and photograph as much class activity as possible. The teacher's purpose is to help impoverished children achieve a degree of self-identity similar to that other children have gained informally and naturally in their own homes.

Forerunner to the sense of adequacy is the sense of trust that emerges during infancy and immediately after if the quality of the home relationship is sound. A child who has had his physical, social, and psychological needs met during the early years of life develops a sense of predictability about the world and security of self that does not emerge in other children. This sense of trust in the world is grounded in the quality of the child's affectional relationships, rather than in the cultural circumstances of his family. The child from a poor home, in other words, is just as likely as the middle class child to have a secure start in life if warmth, love, and reasonable discipline characterize his early home environment. Homes without these characteristics, on the other hand, can breed distrust and insecurity, regardless of the family's material wealth.

Language

Preschool children have already learned much about language, even though formal language instruction is generally postponed until school entrance or even beyond. For discussion purposes, preschool language developments can be divided into reception and production processes; and each of these classifications, into oral and written language.

The beginnings of both oral language recognition and production go back as far as infancy. Infants who were talked to more than other infants tend to have more advanced language development when tested four years later. From the cooing and other vocalizations of infancy to the increasingly sophisticated chatter of the five-year-old, there is improved development along several language dimensions. For some youngsters correct recognition and even articulation of the basic speech sounds are almost completely established by age five, although a few phonemes like *s, sh, th* still give many five- and six-year-

olds trouble. The number of meaningful sounds increases rapidly as do the number of words understood and spoken, the operational rules governing the construction of words (e.g., *ed* is added to a verb to provide its past tense), and the operational rules for putting words together to make sentences. By the time children are five their vocabulary averages well over 2,000 words and their sentences average more than five words in length. They have long recognized the difference between a command and a question. Many qualifying words (adjectives and adverbs) are discriminated and used—as well as nouns, verbs, and even prepositions.

Oral language is absorbed readily and naturally in most middle-class homes. However, the lower-class child is exposed to rather different and in many respects less precise and correct language patterns. He knows fewer labels for the various objects and ideas of the school world, has had less practice in making fine discriminations among objects and ideas, and is less likely to understand language structure, i.e., how words go together to form thought units and complete sentences. He is more likely to use single words and phrases or even gestures rather than complete sentences.

Although oral language learnings provide a basis for written language development, such development does not always follow immediately and automatically. Obtaining meaning from printed and written symbols and, in turn, producing symbols to communicate meaning are separate developmental tasks that take years to perfect in their own right. Nevertheless, by the time youngsters enter kindergarten much progress has been made. Youngsters recognize by name and function a wide array of two-dimensional figures representing concrete objects. They can copy diamonds, triangles, and other geometric forms with varying degrees of accuracy in shape and proportion. They can match letter-like forms. A child's pictures assist considerably in assessing his growth in symbol production. His responses to pictures are guides to his symbol recognition abilities.

Concept Formation and Intellectual Development

Intimately related to language learnings are the concepts youngsters build out of their daily experiences and the general styles of thinking they manifest. Concepts are the real building blocks for thinking, perceiving, and remembering. By the time children reach kindergarten, a large number of rudimentary ideas is already formed regarding classes of both concrete objects and actions (*dog, barking*) and more abstract concepts (*animal, being mad*).

Concepts are formed out of the similarities and differences that children see between two or more objects or events. Language assists concept formation by allowing common labels to be attached to similar objects or events. Thus all four-legged creatures of about the same size that lick Johnny's face

come to be called "dog" by this three-year-old. A few days later Johnny applies the same label correctly to a much larger dog he meets, but incorrectly to a cat. As he is given a new label for the latter creature, he enlarges his concept of dog to include barking rather than meowing sounds.

The entering kindergartner possesses a wide assortment of concepts covering all kinds of objects and actions, and he has developed a host of evaluative standards—right and wrong, good and bad, fair and unfair—that begin to govern his choices about what he should and should not do. The voice of conscience that produces guilt feelings if not heeded has already assumed a governing function. Similarly, concepts of time (now, tomorrow, sometime), location (far, near), number (many, few), and other abstract concepts are already part of his intellectual equipment.

It is certainly true that many of the above concepts are primitive, inaccurate, and undiscriminating compared to their later, mature forms. When young children make comparative judgments between the volume of two beakers of water, the height of two block towers, or the numbers of marbles in two parallel rows, they are often fooled by the most obvious dimensions, i.e., height of water level; level of tower tops, regardless of where the base starts; and the distances from one end of a row of marbles to the other.

It truly behooves the kindergarten teacher to use her pupils' vast array of concepts as a basis for planning additional experiences so that their concepts will become more mature, elaborate, and adequate. The kindergarten child brings to school ideas regarding the world he already knows. The school's task is to extend this world by identifying it and then adding to it.

Concepts are not the only important intellectual dimensions to denote. How young children perceive stimuli and concentrate on intellectual problems also varies, depending in part on their background of experiences. Some youngsters seem to take in the world visually, while others have greater auditory and tactual sensitivity. Kindergarten teachers need to recognize these sensitivity differences and determine how well their pupils can discriminate in seeing, listening, and touching situations.

Even within a sensitivity area, differences exist in cognitive style. Some children distribute their attention to an array of objects in systematic, focused fashion, while others are hasty, unsystematic scanners. Some children assimilate new experiences with memories of earlier ones, while others maintain discrete impressions of sequentially presented stimuli. Some children withhold attention from background cues to focus on the central elements of a stimulus situation, while others are readily distracted by these peripheral cues. [3] Some children classify objects on the

[3] Santostefano, Sebastiano; Rutledge, Louis; and Randall, David. "Cognitive Styles and Reading Disability." *Psychology in the Schools*, January 1965. (Brandon, Vt.: Psychology Press)

basis of general themes or stories: A *woman* rode her *horse*. Other children classify objects primarily on the basis of similarity of parts: One of the *woman's arms* is missing and so is the *horse's tail*. Still others put objects together on the basis of some abstract category: A woman and a horse are both *animals*.[4] On problems where one figure is to be matched with another out of a large number of alternatives, some children choose almost the first alternative that comes into focus, whereas others hold back their desire to complete the task long enough to scan the array and reflect on the various alternatives before making their decisions.[5] Children who react too hastily to questions asked or to other stimuli, saying the first thing that comes to mind, are certainly not ready for many school tasks.

The intellectual qualities discussed above have only recently been recognized by researchers as important aspects of readiness. Yet by careful observation, teachers can begin to take them into account as they plan kindergarten activities and establish expectancies for children.

[4] Kagan, Jerome; Moss, H. A.; and Sigel, I. E. "The Psychological Significance of Styles of Conceptualization." *Proceedings of Conference on Cognitive Processes.* (Edited by J. F. Wright and Jerome Kagan.) Monograph of the Society for Research in Child Development. Chicago, Ill.: the Society, 1962.

[5] Kagan, Jerome. "Impulsive and Reflective Children: The Significance of Conceptual Tempo." *Learning and the Educational Process.* (Edited by John D. Krumboltz.) Chicago: Rand McNally, 1965.

Summary

Readiness has been shown to embrace many qualities, many of which are heavily influenced by heredity in their fulfillment. Equally important, however, are the years of learning that children bring with them to school. When children start kindergarten, they already have developed an impressive number of body skills. They have come to regard adults and even peers in particular ways and to react accordingly. They are already beginning to see themselves positively or negatively along many dimensions. Several aspects of language and communications patterns are already well developed. Kindergartners have an impressive repertoire of concepts and an emerging cognitive style, which to a considerable extent determine how well they will be able to handle future school tasks.

Compared to parents and other teachers, kindergarten teachers would seem to be in a prime position to observe each of the above developmental qualities closely and to continue their nurturance throughout the school year. Much of the success of their program depends on how well they can gear their day-by-day expectancies for children to the multiple qualities of readiness. Recognizing what children already know and how they are likely to respond is an essential preliminary to successful kindergarten programs.

A PROGRAM FOR TODAY'S KINDERGARTNER

RECOGNITION OF the period below six years of age as crucial to all later learning and living has revealed the importance of a sound program of education for the very young and emphasized the significance of the kindergarten in the educational enterprise. Early childhood educators have long indicated the importance of the so-called "preschool" years to an individual's total development. More recently, people concerned with social problems and planning have glimpsed the contributions that certain experiences in this period can make to the prevention and solution of some of our social problems.

Current Program Proposals

Accepting the ineffectiveness of earlier efforts to deal with adolescent school dropouts and juvenile delinquents, sociologists and social psychologists are seeking ways to remove the root causes of the problems. Data from studies of learning have pointed to the openness of intelligence and the importance of the early years in developing potential abilities and aptitude for academic learning. Consequently, sociologists and social psychologists stress the need for compensatory and preventive education programs for young children to treat the causes of the problems

that often become manifest in early adolescence.[1]

Academicians view education in this early period as an opportunity to begin foundational work in the academic disciplines. Early mathematics programs, as well as beginnings of early science and social science programs, are proposed for the kindergarten. Many places emphasize early reading programs, with their beginnings in the kindergarten.

This widespread interest in the education of young children has resulted in many proposals for modification and extensions of kindergarten and prekindergarten programs. Many are exciting and challenging and are worth serious consideration, but some are cause for concern and even alarm. It cannot be assumed that any one educational program is a panacea for all of society's ills. Sound education does significantly help many children with their problems, but in the total job of prevention and compensation, we must not overlook the need for a partnership between the schools and many social agencies.

There are also programs that propose formulas for all early education. Those proposals that stress lingual or conceptual development as the single key to compensatory education and advocate drill and concentration on one or the other of these are unrealistic in terms of the educational needs of all children. Certainly, no one denies the importance of these areas, but a quality program of early education will evidence concern for many other aspects of the growth and development of young children. Often, narrowly defined programs demonstrate little understanding and concern for the ways young children learn. If these programs emphasize drill and abstract learning, the significant role that manipulative materials and self-involving play have in the learning of four- and five-year-old children is overlooked.

Those people who are seeking help in developing early education programs must be very wise in the help they accept and the direction in which they choose to go. Without a doubt, program changes are required to make the kindergarten appropriate for today's five-year-olds. The Froebelian concept of education for the young has not been modified to any great extent since the Kindergarten Reform Movement of Patty Hill's day at the turn of the century.

What is most needed is positive leadership from those who truly understand young children and their learning. Many well-meaning early childhood educators have tended to defend the status quo; and a favorite motto of some has been, "Let us protect the kindergarten child's right to be five." To be five in the latter part of the 1960's is quite different from being five in Patty Hill's day when,

[1] See: Bloom, Benjamin S.; Davis, Allison; and Hess, Robert. *Compensatory Education for Cultural Deprivation*. New York: Holt, Rinehart and Winston, 1965; Hunt, Joseph McVicker. *Intelligence and Experience*. New York: Ronald Press, 1961; and Hunt, Joseph McVicker. "The Psychological Basis for Using Pre-School Enrichment as an Antidote for Cultural Deprivation." *Merrill-Palmer Quarterly of Behavior and Development* 10: 209-48; July 1964.

against great protest, she and other leaders initiated their reform movement. Today, as in the earlier reforms, the child must be kept as the focus. We must see what children are really like and not be swayed by blind devotion to what the kindergarten has been.

Needed Changes

The important questions we must ask today in planning for young children are related to the changes that need to be made. How do most people envisage the kindergarten? Many people should examine their concept of it. Is it regarded as little more than a place where five-year-olds play games, learn nursery rhymes, listen to stories, sing songs, dance, and make pretty things to take home? This notion, and its implementation in practice, may account for the lack of universal support for kindergartens. Until recently, only half of our states provided free public school kindergartens. Less than 50 percent of the nation's youngsters had the opportunity to attend public kindergarten.

Some people think of today's kindergarten as a readiness institution, a place where children are drilled in the skills they will need in the first grade. The result has been that much time has been spent with workbooks or packaged readiness programs.

The fact is that neither of these ideas about kindergarten satisfies a modern concept of the kind of school experience needed by today's young child. Kindergartners are ready for challenging intellectual and social experiences. There is much that is important for them to learn—not because we must ready them to learn something else, but because there are things that they need to learn at this age. There is content for the kindergarten, and it is not elementary school content brought down a year or two. The content, materials, and teaching procedures for kindergarten are appropriate only if they serve the genuine needs of children and only if they recognize the nature of the individual child's learning.

Recognizing the Child's World

Recognizing the stimulating nature of the child's contacts with his world, the major task of early childhood educators today is to define and develop a curriculum that is appropriately challenging and significant to young children. Today's youngsters live closely with others in an exciting, fast-moving world that provokes their curiosity and understanding as children of past generations were never challenged. They travel widely with their families. They view television, see movies, and listen to radio. They are in contact with people and with events that supply a wealth of information and feed their already-active imaginations.

As their store of information grows, misconceptions may develop and fears be generated by the world newscasts that are beamed

at the child along with the excitement of a TV space travel or jungle adventure program. Young children struggle to make sense out of the many things they hear and see around them. They struggle to put together the pieces of the complex puzzle that is their world. They need help and direction to deal with this world.

Young children also face a number of social tasks as they grow into a wider social world. The mobility of people and crowded urban and suburban living bring them into contact with many people and many places outside the family very early in their lives. Each group has its expectations for the young child's behavior: "You must be quiet." "Talk to Aunt Kate." "Give Mrs. Jones your chair." "Don't sit there because that is Uncle Joe's chair." "Let Mary play with your doll." "You must not take the baby's rattle." Such apparently contradictory directions must confound the young child, and attempting to learn the rules in so many seemingly similar situations can be a confusing, trying, and difficult task for a kindergartner.

Learning the rules of your peers when you are four or five or six can be even more trying and troublesome. At home the young child has been a pretty big frog in a pleasant little pool. He has been dominant and rather egocentric. His toys are his. The adults are his. Outside the home, his peers accept him for what he is. Or more specifically, only if what he does meets the peer code. He must give as much as he expects to receive. He must share his toys. He must take turns. If he pushes or hits, he gets pushed or hit. He must learn to cooperate and to help with group enterprises. He must become more independent. He must be able to do things for

himself and to cope with problem situations that arise when playing with his toys and his playmates without undue reliance on adults.

This process of socialization, which is a significant part of the kindergartner's development, is demanding. Success here will be important to family life, to academic pursuits, to business and professional activities throughout his life. Because the kindergarten provides a social situation involving agemates and a variety of understanding adults, it offers a unique setting where a youngster can be helped to tackle these social tasks successfully.

Our newer understanding of what is involved in the process of socialization should cause us to question many present kindergarten practices. The short, one-half-day sessions in which there is a great rush to get "everything" done do not provide enough time for effective child guidance. Overcrowded situations with too many children and too few adults place a great strain on the child's socialization. Twenty-five children with one adult is too many. Young children are struggling to move away from their adult-centered world. They must not be pushed too rapidly into a peer-centered world. They need the security of ample adult attention as they try their footing in what for them is a new world. The overemphasis found in many kindergartens on total-group activities—playing games, listening to stories, showing-and-telling, following directions—do not adequately provide for essential individual activities and guidance.

The social tasks mentioned carry with them the intellectual tasks of understanding people and what it takes to get along with them. Even at this early age many kindergartners are struggling with the need to generalize about social expectations. This is a period when young children are challenged by a number of cognitive tasks, when their curiosity about people and things is insatiable. They want to know what things are, how they work, and what they can do for them.

In the past we have defined the world of the young child as the here-and-now world. Today's children live rather close to the far-away and the long-ago because of our mass media. Children work hard to put things from the far-away and long-ago into some meaningful relationship to the things of their here-and-now world. This can be a gigantic task when you are four or five and your experiences are limited. Misconceptions develop as easily as accurate understandings.

The idea of fixed intelligence and the idea of fixed stages of intellectual development have limited our thinking on the education of young children. There has been a tendency to de-emphasize intellectual development in planning education programs for young children. There has been the fear of overchallenging and frustrating the kindergartner. To be safe, we have felt that the content and activities offered a child should emerge from his day-by-day living experiences. There is a growing recognition, however, that the "emerging curriculum" concept

is not adequate if a child's intellectual development is to be effectively challenged.

The idea of fixed intelligence is passé. We are coming to see that intelligence develops step-by-step throughout the child's growth. Few traits or potentialities are fixed at birth. Recognizing the significance of the young child's transactions with his environment in developing his learning potential, the kindergarten must provide many carefully planned opportunities for such experiences so that each child can develop his maximum learning potential. Nearly all the social and scientific concepts the individual will have during his lifetime are initiated in these early years. The child is beginning to explore the world of people, of things, and of phenomena around him. The concepts he acquires at this time will grow and expand throughout his life.

As he seeks to explore and clarify the phenomena around him, the child needs help in his struggle to sort things out and to relate them to what is already understood. Children work at this search for meaning in wonderful ways often not recognized by adults as genuine attempts to learn. Children play things out, exploring the roles of people they contact or the meaning of events they have observed. They make statements that are really questions asking for adult clarification and extension of ideas and information.

This is all a part of conceptualization—an essential intellectual task on which children begin early. They attempt to use associative thinking, to generalize, to see cause-and-effect relationships, to make inferences, and to reach logical conclusions. Closely allied to the intellectual task of conceptualization is the task of mastering our language, which involves the development of an extensive vocabulary and the ability to employ many syntactical structures. These skills are absolutely essential to a child's intellectual and social development.

The Kindergarten Curriculum

Recognizing that young children face significant tasks in their social, intellectual, and lingual development, the need today is for a kindergarten curriculum designed to contribute directly and effectively to these tasks. It is not enough to merely set an environment of people and materials and let the children's activities emerge. Good teachers will always pick up and lead out from emerging questions and interests, but this is an inadequate base for curriculum development.

The curriculum must be planned in terms of long-range conceptual goals. Activities and materials must be designed and introduced to build toward these goals. There are many possible bases for determining the long-range conceptual goals. In curriculum studies conducted by my associates and me,[2] key con-

[2] See: Wann, Kenneth D.; Dorn, Miriam Selchen; and Liddle, Elizabeth Ann. *Fostering Intellectual Development in Young Children.* New York: Teachers College Press, Columbia University, 1962; Robison, Helen F., and Spodek, Bernard. *New Directions in the Kindergarten.* New York: Teachers College Press, Columbia University, 1965; and Hamlin, R. H.; Mukerji, Rose; and Yonemura,

cepts from certain of the academic disciplines have been chosen as sources of key ideas because these disciplines are the repositories of man's accumulated knowledge about his world, and these key concepts represent understandings that learners will acquire through the years of school study.

In planning the kindergarten curriculum certain root learnings must be derived from the key concepts. These are learnings appropriate for young children that lay the foundation for other learnings to follow and that build toward a broader and deeper understanding of the key ideas from the disciplines. In preparing the way for later learnings in science, for example, young children must be helped to observe carefully the properties and characteristics of objects and life in their environment, to begin to classify and categorize these things by certain distinctive characteristics, and to observe and describe the interaction and interdependence of the things they observe.

Once the goals are defined and the appropriate early learnings identified, activities and materials must be introduced to build toward the learnings so identified. In essence, this approach attempts to identify the concepts children need to understand their world and begins to build the roots of these in kindergarten. The children are helped to explore the world around them, through a variety of activities and materials, so they can begin to organize their experiences into concepts that will enable them to understand and interpret that world.

Children will be helped to work on simple problems which may emerge from daily activities or which may be introduced by the teacher. Such questions as the following may be appropriately considered by the children: Where can we get food for the snake? How much will he grow before he sheds his skin again? What happened to the frost on the grass when the sun came out? What happened to the water in our aquarium during the holidays? The teacher recognizes that such problems as these can contribute to an understanding of a basic science concept—*change*. She guides the consideration of the problems so children begin to grasp the fundamental idea that change is a constant dynamic factor in our world and helps to account for many things we observe around us. Understanding this enables us to predict coming events and to better control our environment. Other such practical day-to-day problems illustrate other basic concepts from all of the academic disciplines. Once the teacher is aware of the concepts and the kinds of root understanding that may be appropriately developed with young children, she is in a better position to plan and guide the activities of children.

The great array of understandings to be developed call for a great variety of opportunities for children to interact with a rich, challenging environment. Accordingly, large portions of the world must be brought into

Margaret. *Schools for Young Disadvantaged Children*. New York: Teachers College Press, Columbia University, 1967.

the classroom. Animals, plants, rocks, and all such realia must be present and used effectively. People should regularly visit the classroom to show and tell things to children and to demonstrate how to do things. Films, filmstrips, and television can effectively bring the world to the classroom. Children must be taken out of the classroom frequently to view and explore the world firsthand. Trips to the nearby pond, to the dairy, to the water purification plant, to the museum, to the airport, to the bakery must be more than annual "larks." For the children these trips are significant experiences with a real world.

Teachers must be prepared to guide a child's thinking about his transactions with his world. Only by encouraging and guiding thinking and reasoning can she adequately support the process of conceptualization. There will be less telling and more support for a child's exploration and discovery of answers for himself. Over a period of several days I recently observed kindergartners playing with a railroad steam engine constructed from a barrel painted black for the boiler and a large pasteboard box appropriately trimmed and fastened to one end for the engine cab. A large bell mounted on the front end of the barrel was some three feet from the cab. Although the children liked ringing the bell as they played at operating the train, they could not reach the bell's clapper from the cab. Each time, someone had to leave the cab, run around in front of the train, and swing the clapper.

The teacher did not tell them what to do; instead, she discussed the problem with them and helped them get a clearer notion of what needed to be done: Some arrangement had to be made to make the clapper ring without leaving the cab. She then went on to another group during this activity period, leaving the boys on their own. One tried knocking the clapper with a long stick. This worked to a degree and the play resumed, but the youngsters found it difficult to control the stick. They were not satisfied and told the teacher so at clean-up time. She said, "Let's think about the problem and see what we can do about it tomorrow."

The next day one youngster arrived early with a piece of window sash cord and announced that he knew how to make the bell ring. He had seen a large, toy fire engine in his neighborhood with a bell that was rung by a string attached to the bell and pulled by the driver. His father had given him the rope, and he and his friends proudly set out to fasten the cord to the clapper. By not solving the problem immediately, the teacher had challenged and encouraged the children to try significant problem solving requiring reasoning, trial-and-error, and observation.

A kindergarten curriculum designed to foster thinking and conceptualization would encompass activities planned to result in learnings in many areas of knowledge. There would be concern for root learnings that contribute to understandings in science, social studies, mathematics, language, and the arts. There would not be an overemphasis on reading readiness, reading activities, and other skill

areas. The emphasis would be on a balanced approach to content for children. This approach recognizes that a broad base of understanding and vocabulary and use of effective language add much more to a child's later ability to read and write well than the overuse of specific drill in readiness workbooks and other such materials. There are language learnings appropriately defined as early reading that have a place in the experience of many youngsters. These involve attention to building an adequate, spoken, and meaningful vocabulary; control of syntax in oral language; the relation of language sounds to the symbols for these sounds; and the ability to combine the symbols into expressive word units.[3]

However, a kindergarten curriculum planned specifically to foster basic learning in certain academic areas does not imply a sedentary program consisting entirely of direct teaching and drill. Young children do not learn best in these ways. Play is, and must be so recognized, the basic way in which kindergartners learn and explore and test ideas. The most effective learning for them involves manipulation and self-involvement in playlike situations. Play is serious business, and chil-

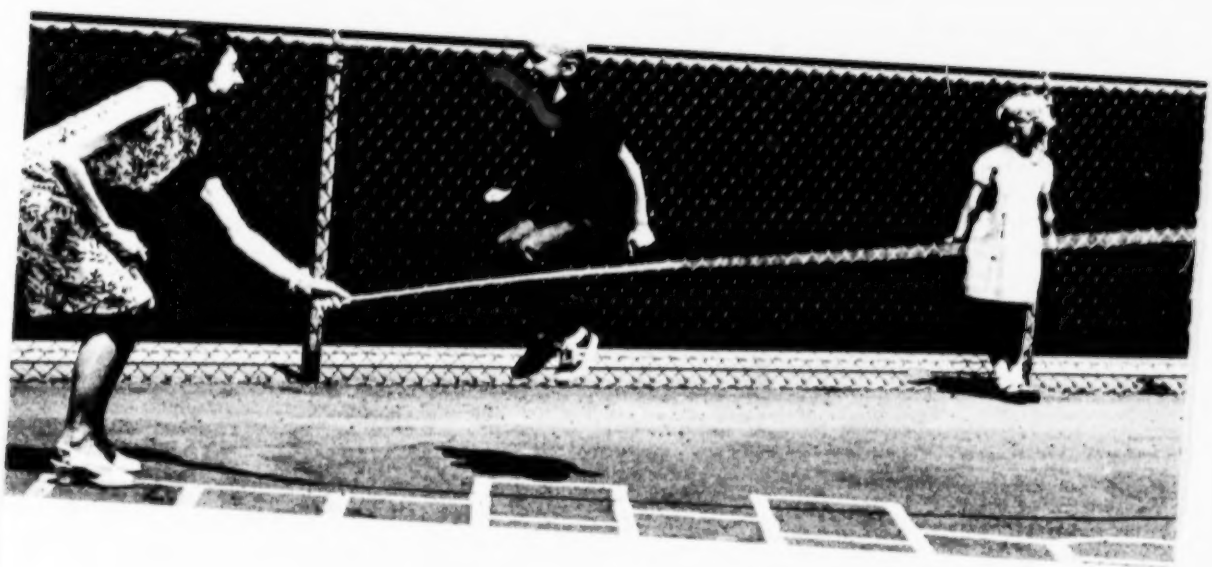
[3] See: Wann, Kenneth D. *Beginning Reading Instruction in the Kindergarten.* E/K/N/E Research Review. Washington, D.C.: Department of Elementary-Kindergarten-Nursery Education, National Education Association, December 1966; and Wann, Kenneth D. "A Comment on the Denver Experiment." *NEA Journal* 56: 25-26; March 1967.

dren work hard at it. Remember that before coming to the kindergarten the child has never *worked*, in the ordinary sense of that term. Yet he has learned more during his first five years than he will in any period of comparable length in his life. He has learned to walk and to talk. He has learned a language and thousands of words and meanings. He has started on most of his concepts. We must continue to build and encourage learning through play. Teachers must guide the play and introduce materials and activities that add significant content.

Direct teaching and drill also have an important place in the learning activities of young children. For short periods and for individuals and small groups, nothing can more effectively bring about significant learning than a well-conceived, direct teaching experience. This may involve the teaching of positional concepts—such as top, bottom, middle, highest, and lowest—to a group of three or four children by using colored cubes stacked and restacked according to specific directions, or it may involve the teaching of similarities and differences in language sounds through the sorting of objects. If the emphasis is on initial sounds, objects may be sorted according to their beginning sounds. If the emphasis is on rhyming endings, objects may be sorted according to rhyming pairs—bell, shell; cork, fork; star, car; rope, soap. Children react well to such situations and often request that particularly challenging ones be repeated.

Summary

Kindergarten is a vital element in the educational enterprise. It reaches children when they are ready to learn a vast array of skills and understandings essential to all later learning and living. The curriculum for today's kindergartens must be a part of the continuous learning of children throughout their school experiences. It becomes essential, therefore, that the learning activities be planned with long-range goals, beginning, of course, where we find today's kindergartner.



THE KINDERGARTEN TEACHER

FROM OBSERVATION of the duties a kindergarten teacher performs, one might conclude that she needs the skills of a zookeeper, a gardener, an acrobat, a judo expert, a chef, an artist, a seamstress, and a carpenter. Outside of the kindergarten, no other teacher is expected to be competent in so many areas. But where else does one find a classroom that can contain at any given moment a garden of new lentil shoots,.a guinea pig, plastic mats for somersaults, a chocolaty aroma of pudding thickening over a hot plate, and dozens of tempera paintings still wet from the brush, while a birdfeeder is being hammered together on the carpentry table? The teacher's skills, as listed above, are generally regarded as secondary to her prime specialization in cultivating good parent-school relationships, analyzing children's developmental patterns, and above all planning and working for each child's progress in school learning.

Teaching Tasks

Kindergarten teachers must be prepared to help children perfect their oral language skills; to make considerable progress in perceptual-cognitive development; to view themselves as growing, learning, and valuable per-

sons, equal to others and therefore capable of learning social skills needed for interactive encounters in school and in life. The skills needed to accomplish the teacher's task would be formidable for any individual. Fortunately, there is a growing trend to provide services and auxiliary personnel so that requirements can be more realistic.

Helping children to perfect oral language skills includes eliminating infantile speech patterns, adding forms of standard English communication patterns, and making progress in speech fluency and vocabulary expansion. Increasing auditory and visual discrimination contributes to language development in its oral-aural and phonemic-graphemic forms. Since most young children need to develop finer auditory discrimination, the kindergarten teacher works with children for discrimination among sounds—in pitch; rhythm and timbre; words, phrases, and sentences; rhymes and chants; and poems and prose. Teachers need linguistic understandings of how a child learns a language, as well as literary criteria for selection of books and poems for a child's use.[1]

The young child needs the same guidance in his psychosocial development as in his cognitive growth. He needs to learn to like himself and others; to feel competent, adequate, and independent; and to master the social skills needed for group interaction in our culture. He can be encouraged in his warm spontaneity and in his beginning rational objectivity about himself, about others, and about the world around him. Teachers realize how much physical growth the young child is accomplishing and how important it is to create healthful and nurturant conditions for the child's physical development in school.

Children need to grow to value our democratic way of life and to become more skilled than their elders have been in helping groups and peoples to live peacefully together, in respecting each other's rights, and in insisting on the moral worth of each individual and the equal value of all ethnic and racial groups. Children's energies can be freed for creative efforts in art, in science, in literature, in social relations, in recreation, and in daily living, where acceptance and appreciation of each child prevails.

If children can grow to be good citizens, they can also become free citizens—thoughtful, reflective people able to weigh evidence, to reach decisions, and to have the courage of their convictions. Early induction into the rights and obligations of citizenship is indicated. The kindergarten cannot accomplish all the desired growth in civic responsibility, but sturdy beginnings can be made here. It is especially important, in the context of the continuing struggle throughout the world for political and civil rights, for kindergarten teachers to help children experience the

[1] Robison, Helen F., and Wann, Kenneth D. *Status Report: Study of Intellectual Stimulation of Disadvantaged Pre-Kindergarten Children.* New York: Center for Urban Education, July 7, 1967. (A study pursuant to a contract with the U.S. Department of Health, Education, and Welfare, Office of Education, Washington, D.C.)

meaning of individual rights, as well as obligations, in a social context.

Thus the kindergarten teacher needs well-developed skills in guiding group dynamics for young children; in meeting developmental needs in as many areas as possible; in fostering independence of thought, love of learning, curiosity, persistence, intrinsic rewards and creativity, in addition to teaching social skills and skills of symbolic representation. Another important attribute of the teacher is to be skilled in teaching the creative arts so that she may develop worthwhile experiences for young children in music, art, and literature.

Drews states that a central need in education is for children to explore and learn independently and to be introduced to ethics and values. She lists six directions in education for children to become self-actualizing persons, to wit:

1. Children must be able to select learning problems significant to them.
2. Children must learn to think creatively and flexibly.
3. Children must learn to generalize from data and to group ideas meaningfully, in order to solve problems.
4. Children must learn to generate models and theories to explain phenomena.

5. Children must learn ways to test hypotheses and to make critical judgments.
6. Children must arrive at decisions, at some point, and take a stand.[2]

Autonomy in learning goals and independence and flexibility of thinking are lifestyles too important to be regarded as peripheral to kindergarten education. If teachers value such goals, the classroom will reflect them in clear and unmistakable ways.

Teaching Strategies

The nurture and stimulation of perceptual-cognitive skills requires considerably more than collecting materials and creating a rich environment for learning. Teacher understanding of child development is an important context for assessment of each child's needs and achievement. Assuming, with Piaget, that the child's sensory-motor intelligence is the necessary base for all subsequent conceptual learning and logical thinking, the teacher stimulates the young child's active manipulation of objects and the physical movement of his own body before she offers him symbolic, representational, or abstract material. The teacher needs excellent experience in observational and assessment techniques if she is to plan relevant and significant learning experiences for each child in the class.[3]

A working knowledge of the wide range of available teaching strategies is necessary if teachers are to individualize programs and to help all children make satisfactory progress in school. Young children have to learn to relate three-dimensional objects to their counterparts in two-dimensional pictures. It requires considerable learning, not only to translate the complex physical world into representations in pictures but to learn the language of pictorial symbolism, where suggestion, approximation, or stylized or conventional forms stand for, but do not accurately reflect, reality. Children have to learn the meanings of specific signs and symbols as well as intricate symbol systems and the meaning of symbolization.[4]

Teachers must learn skills of creating "cognitive dissonance" so that children are im-

[2] Drews, Elizabeth M. "Self-Actualization: A New Focus for Education." *Learning and Mental Health in the School.* 1966 Yearbook. Washington, D.C.: Association for Supervision and Curriculum Development, a department of the National Education Association, 1966. pp. 97-98.

[3] Wilhelms, Fred T., editor. *Evaluation as Feedback and Guide.* 1967 Yearbook. Washington, D.C.: Association for Supervision and Curriculum Development, a department of the National Education Association, 1967. 283 pp.

[4] Robison, Helen F., and Mukerji, Rose. *Concept and Language Development in a Kindergarten of Disadvantaged Children.* Project S-320, U.S. Office of Education. New York: Teachers College, Columbia University, 1966; Gray, Susan W., and others. *Before First Grade.* New York: Teachers College Press, Columbia University, 1966.

pelled to pursue reasons for the unexpected, the disjunctive, or the mismatch. Skills in helping children to transcend perceptual clues and to learn the nature of objectivity through social experience are now seen as valuable instructional strategies for kindergarten teachers.

Cognitive development thrives on environmental stimulation, teacher expectations, and the appropriateness of the learning experiences offered to children. Fact gathering is necessary, if the child is to acquire sufficient familiarity with his world to deal with it intelligently. A kindergarten teacher today needs to learn how to select and structure content for a young child's learning. She can offer meaningful learning situations that provide early practice in using fact collections for comparison, contrast, and classification and for beginning efforts in generalization and evaluation. Although she accepts the child's struggles to reach more complex forms of thinking, the teacher does not underestimate his cognitive growth or his need for adult models and for informational feedback.

Problems of assessment have not been bothersome to kindergarten teachers in the past because they were primarily evaluating the child's "readiness" for first-grade reading instruction. This is too narrow an assessment base for the variety of learnings children are now expected to acquire in kindergarten. Newer views of classroom teacher assessment goals and instruments can provide much more feedback for planning children's learning experiences and assessing the results.[5]

Obviously, each child must accomplish his own cognitive growth and development. Cognition is inseparable from all other facets of the child's development. Teachers are usually only second to parents in the weight of their influence on the child's progress. More objective than parents, more knowledgeable about comparative and longitudinal progress, and more skilled in the practice of teaching children of varying capacities and abilities, teachers are required to foster children's learning by sensitive intervention in appropriate ways. The range of instructional materials and teaching strategies is so wide that teachers can find the precise combination they seek for almost any child. The caution remains, however, that the child's only significant base for learning is physical, active, sensory, concrete, and manipulative activity. Most teachers build solidly on this base, adding the verbal, representational, symbolic, and abstract when they see this has purpose and meaning to the child. The prime consideration for all teachers is the need to match the learning task to the child and to assess his progress regularly and systematically.

Research now in progress in teaching strategies for early childhood education promises to open up rich new stores of data and insights in the near future. While teachers

[5] Gordon, Ira J. *Studying the Child in the School.* New York: John Wiley & Sons, 1966; Robison, Helen F., and Spodek, Bernard. *New Directions in the Kindergarten.* New York: Teachers College Press, Columbia University, 1965.

try to keep up with the mounting list of new books, monographs, and articles, they can assume that there are always more teaching strategies available than those they habitually use. Their own informal experiments can add zest to their teaching as well as suggest new hypotheses to be tested in research studies.

Teacher Attitudes and Personal Qualities

Skills, however, are only one part of the kindergarten teacher's prerequisites for helping children learn. Skills may be quite useless without humanistic attitudes and feelings. Teachers tend to be successful with young children to the extent that they like and value this age group, understand their growth patterns and problems, have sufficient flexibility and tentativeness to support and encourage individuality in all its important aspects, and have acquired enough professionalism to learn from teaching while they teach for learning. For successful teaching of young children, a teacher's attitudes must be accepting of parents, as well as of their children, with humility for the information and

guidance available from parents. Cooperative planning and teamwork with other school personnel contributes to good classroom atmosphere and efficient implementation of curriculum plans.

Humanistic attitudes require leaping bureaucratic fences or helping to eliminate them wherever these constitute barriers to person-to-person communication. Teachers themselves must exercise the rights and obligations of citizenship if they are to imbue children with the glories of democratic government. Among other things, this requirement is one of individual responsibility and conscience. Children cannot catch this if they do not experience it early in their lives.

The attitude most likely to lead teachers to ever greater skills and teaching effectiveness is that of being a learner. Even the best education programs can only prepare teachers to begin to encounter the complex problems of classroom teaching and learning. Teachers have to accept the tentativeness of knowledge in their own field, as in all others, and the need for lifelong professional inquiry and study, just as scientists do. Problems can only be solved temporarily and in a current context before situations change and old problems reappear or change their guise.

Summary

Kindergarten teachers are not generalists, but specialists with more than one specialty. If she only has one string to her bow, it is doubtful that a teacher will want to remain in the kindergarten. It takes great talent to be a successful kindergarten teacher—talent plus very hard work. The important areas of expertise of the kindergarten teacher are the following:

1. Understanding of young children's developmental patterns and learning styles and skills in assessing progress
2. Ability to teach children to value themselves and others and to develop the beginnings of independent and free citizenship
3. Skills in developing creative arts programs with young children
4. Skills in fostering young children's intellectual development, through appropriate teaching strategies and knowledgeable use of instructional materials
5. Skills in language arts development
6. Knowledge about some of the major disciplines into which knowledge is segmented and ability to foster root learnings in all possible areas
7. Skills in fostering children's optimal physical development
8. Skills of working with parents to harmonize school-home expectations and procedures.

Teachers must be self-confident and secure with these requisite skills but must also possess the attitudes that foster the young child's lifelong love of learning. Teachers can continue to stimulate and challenge children only if they themselves love learning and habitually work at it.

PARTNERSHIP IN KINDERGARTEN EDUCATION

ISOLATION, NO MATTER how splendid, has more penalties than rewards for today's teacher, whose opportunity to work effectively and satisfyingly is greatly increased by the presence of working partners. The range of partners now available to the kindergarten teacher enables her to tap contributions and knowledge from a number of widely diverse sources.

The Kindergarten Team

There has been a convergence of many disciplines and helpers upon the kindergarten classroom as a consequence of the increasingly complex role of the school and the ever-growing knowledge about the development of young children. The psychiatrist, psychologist, school social worker, and guidance teacher are present-day colleagues of the kindergarten teacher. Members of the health services are others who can share new insights about young children with teachers. The recently augmented services of auxiliary personnel, the paraprofessionals, and the ever-present potential of parents' contributions add to the wealth of assistance. The supervisor, the school principal, and other administrative staff are there to facilitate the kindergarten teacher's functioning. But to be really

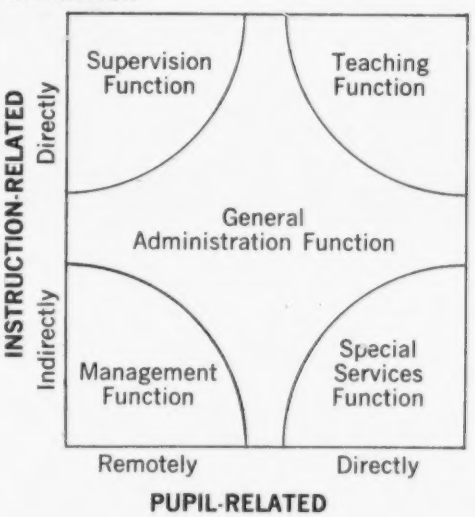
meaningful the assistance has to be wanted, sometimes solicited, by the teacher. She is the key person in accepting as partners those competent to assist in the task of educating young children.

The school can be viewed as a system operating for teaching-learning to take place. The teacher is the person on the staff most directly concerned both with instruction and with children. Others in the school deal more peripherally with some dimensions of these. The parts of the system can be analyzed along the dimensions of instruction-relatedness and pupil-relatedness. Figure I delineates the functions of the school staff in terms of these dimensions.[1] This diagram places the teacher into a framework shared by psychological, administrative, and other school services and helpfully sorts out who is responsible for what in the busy transactions of a school. When areas of responsibility are defined, working partnerships that are complementary and supportive can be established with a minimum of overlapping into another's professional territory.

Sufficient experience from the past exists to provide evidence of the potential in a team, multidisciplinary effort. But too often status barriers and conflicts in role concepts—who does what when and who knows what—arise. This chapter will briefly review aspects of the various roles played by the kindergarten teacher and her occupational partners.

Figure 1:

MAJOR FUNCTIONS OF THE SCHOOL OPERATION



The Kindergarten Teacher's Role on the Team

Teachers occupy the top-right corner of the diagram, thus delineating their role as directly instruction-related and directly pupil-related. In this sense the kindergarten teacher shares, along with all teachers, a special position in the school system.

[1] Taken from: Harris, Ben M. *Supervisory Behavior in Education*. Englewood Cliffs, N.J.: Prentice-Hall, 1964. p. 8.

However, all the professional partners have one thing in common. They are not working with fellow professionals within their primary professional milieu, i.e., the clinic, the social work agency, or the hospital. Thus, the kindergarten teacher should take the initiative in trying to help the professional who is not an educator learn how to make the most effective use of his special knowledge By raising questions, goals, and problems honestly with members of different disciplines and soliciting their help, these professionals will learn how their particular professional skills and competencies can fit into the school setting.

Part of this can happen informally, but operational procedures for team functioning need to be structured. For example, a regularly planned meeting attended by all the professionals and staff working with the children provides the ideal setting for the kindergarten teacher to raise such questions. A joint pooling of information on an educational situation or on an individual child will produce a vast collage of information, from which new ways of helping children can result. Such a meeting should also help the staff see how differently the same school situation often appears through a different professional lens. While these meetings are not likely to eliminate interdisciplinary rivalries, they will help the various professionals get to know and respect each other and develop richer work relationships. However, synthesizing team contributions into practical applications in the classroom must remain the sole responsibility of the teacher and is not to be abdicated.

If these meetings are valued by each professional, they can be intellectually stimulating and can produce better school services and education as well. The kindergarten teacher is well advised to try to develop interest at her school for such team meetings—if they are not already an integral part of the school's functioning. The kindergarten teacher —with her feet firmly on the ground of the classroom and with her intimate daily contact with the children—can do most to dispel rivalries and anxieties and draw on the tremendous reservoir of willing service for young children. Due to the present shortages in all professions, this reservoir is unfortunately small, thus extra ingenuity is required to maximize what is available.

Successful professional partnerships, like any lasting meaningful relationships, demand a great deal of effort and energy. Much thought is presently given to multidisciplinary understandings, but these are in an early, embryonic stage, which does not make for smooth sailing. Yet the stimulation of being involved in formative, even pioneering, beginnings is rewarding.

Some observers of cross-disciplinary functioning note that in multidisciplinary interaction educationists too often leave the initiative to the other disciplines, somehow relegating their own special knowledge to a lesser plane. In dealings with members of other disciplines and professions, the kindergarten teacher must be clear about her own

role and the nature of the knowledge that she alone in the team possesses about classrooms, children in classrooms, school learning, and school teaching. In a world of increasing specialization, the generalist [the kindergarten teacher] does tend to feel overwhelmed by the territory he has to cover. It is a temptation to sit back and listen when specialists in more narrowly defined areas of work express their specialized knowledge. But it is a temptation to be resisted. The specialist's view, too, is only partial. It is a temptation also to forget the very clear limits to the contribution any one discipline can offer the teacher. For example, it is not useful to look to specialists whose function is pupil-related for answers to problems of instruction.

Psychiatric and Psychological Services

Psychiatric and psychological services are largely pupil-related (Figure I, lower right corner). Relatively few psychiatrists are available to school systems. Yet where they exist, they serve the important function, among others, of clarifying for teachers the psychodynamics of the behavior of mentally ill and mentally healthy children. They can offer insights into these behaviors, thus helping the teacher develop strategies for either sustaining such children within the structure of the classroom or else making the child's removal to a special setting an occasion for learning more about human behavior, both for the child and for the class.

The school psychologist—like the psychiatrist—can help evaluate the meaning of deviant behavior in young children, and his reports can add fresh or reconfirming data to the teacher's own. Both psychiatrist and psychologist depend on the teacher to give them the rich and full information that she has accumulated on a particular child. Like the teacher, they are behavioral scientists and their appraisal of a child is enhanced or diminished by the kind of written and oral material the teacher passes along. It is painstaking but worthwhile for the teacher to write a full referral summary, supported with anecdotal records of the child's behavior. Such a demand comes rarely, but the learning provided by such a careful, specific, child-study effort can add to the teacher's understanding of the behavior of other children in her class. With the information from the teacher and their own data, the psychiatrist and the psychologist can give a picture of the psychodynamic forces influencing the child's behavior. The teacher has to absorb their report and integrate it into what she knows about other forces impinging on the child, e.g., sociocultural forces and the impact of the classroom itself. One might say she has to make "classroom sense" out of this, i.e., to extrapolate its meaning in terms of the classroom and her role there.

It is important that the teacher focus on the solution of educational remedies for problem situations. Legitimately, the psychiatrist or psychologist can give no prescriptive specifics on the way the teacher can or ought to behave in various classroom situations. This is beyond the limits of their competencies and skills. Such specifics are the outcome of the teacher's own competencies and skills, which grow only as the teacher is willing to test ideas through the process of inquiry. She must feel secure in calling in psychological or psychiatric services and in using her own knowledge of psychology.

Using knowledge from psychology is an indispensable part of the teaching process. By knowing a child's underlying feelings, anxieties, and problems and how he is defending himself against change or what he thinks are attacks, the teacher is sensitized to new ways to teach the child effectively. She can use such teaching to help him meet failure, make friends, and master learning in areas that will offer him many ways of achieving.

Besides helping with individual children, the psychologist also has many ways of evaluating the educational performance of children, thus providing a shortcut for the teacher to assess the level at which her children are likely to function. She should still remain open to changing this assessment. In fact, the psychologist would be the first to warn against the misuse of test results. In most cases they indicate only present functioning on the test, not potential competency.

Two major goals of school psychiatrists and psychologists are to maximize a child's potential and to do so while building and strengthening his mental health. As a result the kindergarten teacher can look forward to tests that will not only indicate what a

child has learned but also what he needs to learn.

The psychologist and the psychiatrist can offer support and insight to the teacher herself as she works through a variety of classroom situations. Teaching young children is emotionally demanding and sometimes draining. It is also a gatekeeper's position in the sense that the kindergarten teacher is significant in helping young children retain a balanced view of themselves and life. Thus, the teacher's own mental health is of primary concern because she is so influential in the lives of the children.

The teacher can find the necessary support in a variety of ways. One way is to share her feelings with the psychologist or psychiatrist, to bring for open discussion some of her everyday, recurrent problems and upsets. This does not necessarily mean that the teacher must become involved in psychotherapy, rather it means that she tries to maintain a voluntary, consultative relationship, in which her work, not private life, is the primary focus.

Psychological and psychiatric services are in such short supply that some schools have psychologists and psychiatrists work with *groups* of teachers to maximize their time. Such an arrangement can support and augment the teacher's own psychologically and psychiatrically derived knowledge, thus providing yet another way to develop a broader theoretical base for her usually excellent hunches and intuitions on the meaning of certain behaviors of children in classrooms. To be really effective, such meetings should be jointly planned on a regular basis, with all those participating taking an active part in planning the focus and direction to be taken.

Social Services

Like psychological and psychiatric aid, social services are also directly pupil-related. The school social worker and the guidance teacher are specialists in working with families. They usually grapple with vast caseloads and thus must rely on help from other members of the school team.

The kindergarten teacher's role is particularly significant here because she meets the children and their families on their first encounter with the school. As all kindergarten teachers know, the parents' bond with the school is intimate at this point. The record is fresh; and when initial mistrust or anxiety exists and is handled with understanding, the parent-teacher relationship is one of the most satisfying aspects of teaching. Once she has established such rapport, the teacher can help the social worker get to know the parents.

We know that parents of children with problems often need guidance themselves. While the teacher can help most children in her class with their problems, the social worker has the expertise to give parents with problems the special help they may indirectly require for themselves. The school's social services can refer families and children in trouble to the appropriate community or

nonschool agency. They are the school's specialists in diagnosing a family's needs and in seeking out and following through on the complexities of a professional referral.

The school's social services offer the teacher valuable consultant help. For example, the school caseworkers are skilled interviewers. Thus, when a difficult parent-teacher conference is anticipated, they can help the teacher maximize the usefulness of the interview. The social worker can also help the teacher better grasp the healthy, as well as the disturbed, dynamics of the family —the intertwined needs of its members and their impact on the children. Both the social worker and the guidance teacher can help the kindergarten teacher assess her effectiveness in working with parents through a mutual analysis of their own approach and goals for parents.

Health Services

School medical personnel have been welcome partners in early childhood education for a long time; and, in conjunction with the school social worker, they can be important liaison agents between children and community health services. Focusing on both remedial and preventive health services, the function of the school nurse, dentist, and doctor is primarily pupil-related.

Although staff shortages have often prevented satisfactory health coverage, the teacher can help make the medical team's work smoother by teaching kindergartners understandings about health care. The nurse, doctor, and dentist have many basic health concepts they want young children to grasp; and the teacher can translate these into a level appropriate for the children's developmental stages. Her own knowledge about the health of young children can be updated by her contact with the professionals in health services. In turn, the kindergarten teacher can relate how her class reacts to the medical program.

The teacher can familiarize herself with each child's medical history; and, where priorities must be set, she can point out a family that might need but is not receiving medical treatment. This referral function of the teacher becomes particularly significant in view of the present shortage of medical services, especially in low socioeconomic areas.

Many young children rarely see a dentist. Yet the care of teeth in the early years is vital because the first permanent molars develop between four and eight years of age. These molars tend to develop cavities easily; and if several of these teeth are lost, the child will have a future of dental and, consequently, health problems. These are also the years when children often fall on their teeth, damaging nerve endings—another reason for careful dental follow-through.[2] Two other important areas for medical care at this age

[2] Brown, William E. "The Prevention of Oral Diseases in Preschool Children." *Children* 13: 177-80; October 1966.

are hearing and vision. Teachers are excellently placed to detect problems here, when more formal examinations fail due to the difficulty of communication with young children. This all takes time, which is a limited commodity for kindergarten teachers.

The Paraprofessionals

For many years teachers of young children have needed extra classroom help to accomplish their educational goals, and at this time many new sources of aid are appearing in the classroom. In the sense that they are working "beside the teacher," one such group is called "paraprofessionals," "auxiliary personnel," or "aides." Like the teacher, these staff members are instruction-related and pupil-related.

Since the paraprofessional works with the kindergarten teacher, the latter finds herself needing to assume a new leadership role. The kindergarten teacher is no longer solely responsible for her class of children. She now has a colleague. But this means that she has to develop a new way of viewing her time and her responsibilities. She often has to begin to get new knowledge about how one effectively supervises a subordinate so that the relationship remains dynamic and fruitful. This implies the attainment of what Chris Argyris called "psychological success": a state in which basic individual needs do not conflict, but instead are strengthened through satisfying, productive work.

The kindergarten teacher should regard the paraprofessional as a person on the professional escalator, not someone fixed in an occupational pigeonhole. She should treat the paraprofessional as a potential professional and facilitate his advancement to full professional status, if possible, realizing that there are never enough teachers.

Motivations and attitudes of this paraprofessional group will vary enormously. One person's experience in training aides for day-care centers is noteworthy here. She was assigned a group of high school dropouts, whom she expected to be irresponsible and difficult to motivate. Instead, they related well and easily on an intuitive, comfortable level with the children. But they also "wanted to push ahead faster than they were really able to go. The first flush of adequacy brought with it a feeling: 'This stuff is easy; I can do it without help,' perhaps as a sort of overcompensation for past feelings of inadequacy and failure."

Working with another adult is not always easy; it is not always going to be successful. Just as some teachers have to leave the profession, some paraprofessionals will need to be guided into other work. But before this final step is taken, all efforts need to be made to plan for and develop good working relations. Time must be taken for regularly planned meetings and for mutually exchanged evaluations. As part of the school faculty, the teacher must do her share of developing performance criteria so that the profession will be better able to assess the contributions of paraprofessionals.

In her new leadership role the teacher has to offer guidance and structure to the paraprofessional, including a rather long period of structuring and pacing learnings, so that they can be absorbed by someone without four or five years of college. For many teachers it may mean making explicit and available teaching plans that have become second nature. It may mean a long, hard look at the classroom curriculum and its rationale to better interpret it to the paraprofessional in a way that will have meaning and carry-over in terms of how she applies it in the classroom. Paraprofessionals do not know the shibboleths of the teaching profession, and they will ask astonishing questions. This can be useful, for teachers often have gained refreshing new insights into their own performance this way. Having to make one's curriculum explicit and to support one's actions with a rationale that is understandable "common sense," not jargon, is a healthy, though demanding, exercise.

There is a movement toward developing a hierarchy of specific duties for paraprofessionals; and, certainly, everyone is more comfortable knowing what their specific responsibilities are. Yet, teaching kindergarten does not lend itself to neatly apportioned tasks. Pearl and Riessman, for instance, recommend as one of an aide's functions "exercising control over a class while teacher gives instruction to a particular child." [3] Exercising control involves discipline, which is a function of the overall program. This seemingly neat task, "exercise control," calls for many kinds of skills and understandings. Some paraprofessionals have these intuitively; others do not.

Deciding what the paraprofessional does in the classroom is the teacher's decision in conjunction with her school and the requirements of the profession. Yet it is a mistake to label specific acts as "teaching" and others as "nonteaching." Aptly putting the issue of what aides can do and what teachers should do, Thorwald Esbensen notes: "We must conclude, I think, that the distinguishing characteristic of the qualified teacher is his ability to *analyze* the instructional needs of his students, and to *prescribe* the elements of formal schooling that will best meet those needs. In this view, it is altogether proper for the teacher aide to be more than a clerical aide. The usefulness of the teacher aide should be restricted only by his own personal limitations in whatever duties may be assigned to him by the regular classroom teacher." [4]

Each teacher needs to develop a plan in conjunction with the aide and within the setting of the school. Certainly, responsibilities should be delineated as clearly as possible. Their accomplishment can then form the basis of the teacher-aide evaluations, which need to be planned on a regularly scheduled basis. Extra time spent on thorough evalua-

[3] Pearl, Arthur, and Riessman, Frank. *New Careers for the Poor*. New York: Macmillan Co., 1965.

[4] Esbensen, Thorwald. "Should Teacher Aides Be More Than Clerks?" (Editorial) *Phi Delta Kappan* 47: 237; January 1966.

tion periods and conferences will be more than repaid by helping a classroom colleague develop skills and competencies.

The Supervisor

Perhaps it has sounded as if the kindergarten teacher were a free-floating body; but, as everyone who has worked in schools knows, she is in most cases a member of a small or large bureaucratic organization. In the future the kindergarten teacher's function will involve more supervisory activities. The nature of her job will demand new skills and competencies, and she may join forces with a college or university in a service or research connection. Time must be made for her to study if she is to become an effective education diagnostician—free enough to try out new and original ways of developing curriculum and sophisticated enough to use and, with help, interpret devices that test the effectiveness of what she is doing. Too much researchable curriculum is thrust on teachers who, if only they had been included from the beginning, are well able to actively participate in developing content and raising testable hypotheses about it.

The kindergarten teacher needs help and support to carry out her work. Schools are trying to respond to the need for change, and there is a keen realization that the teacher must be helped to have a sense of some autonomy if she is to behave professionally, not routinely. Her ally in this search for autonomy and professional self-development ought to be, and often is, the early childhood supervisor.

Since the supervisor is not responsible for a class, he can spend his time viewing the early childhood field from a broader perspective. He is only remotely pupil-related but is directly instruction-related. (See Figure I.) By maintaining some separateness from the immediacy of teaching, the supervisor is able to look forward more objectively to innovations and ideas that will better achieve the school's goals. The supervisor should be a scholar in early childhood education and an excellent resource person with an ability to intellectually stimulate the staff. The purpose of the supervisory relationship might be to help the teacher examine her teaching objectively and to develop skills and competencies.

Professional growth is not effortless or tranquil. The kindergarten teacher and supervisor have a unique bond: In implementing a sound instructional program they fail or succeed together. In the complexity of partnerships demanded of anyone working within a school system, they also share a common, professional background, which should be mutually reinforcing.

The Principal and School Administration

The overview and responsibility for the school lie with the principal. His functions, octopuslike, must include the dimensions of pupil-relatedness and instruction-relatedness. (See Figure I.) Many principals do not come prepared with a knowledge of early

childhood education, but they do have the greatest interest in seeing how the kindergarten program fits into the general school program. The kindergarten teacher has the job of interpreting what she is doing and of fairly evaluating ideas for innovating her program in light of the school's purposes. She needs to keep the principal well informed on her relations with parents. While he will not have time to know them all, he is nonetheless the person with whom parents will have continuing contact throughout school. He ought to be brought up-to-date regularly on all aspects of the kindergarten program. The "open door" policy for the principal makes sense. Frequent invitations to him for brief views of the program help him see how kindergarten goals are implemented and, consequently, help him interpret them to the superintendent of schools and to the public more effectively. Even today a large segment of the public remains confused about the educational values of the seemingly free play of the kindergarten. A supportive principal can help the teacher show parents how she achieves educational goals through play.

The kindergarten teacher must win the full support of the principal. He is responsible for the school's educational program, and he must be fully included in the kindergarten's program and goals. The principal also helps the teacher "get outside" the insularity of a classroom of young children, because in the immediacy of the kindergarten room it is possible to forget the ultimate goals of education. Thus, the principal can be a helpful partner in broadening the teacher's perspectives of educational goals.

Working with Parents

The importance of cooperation between parents and teachers has been recognized for a long time. In the past most teachers, in common with other professionals, have been most effective in working with middle class parents, since they both share the same frame of reference. They both come from backgrounds where education is not only valued (almost everyone values education, no matter what their income level) but where children are actively, and often consciously, prepared for school. Partnership with such parents is not too difficult once we learn, through hard experience and study, to understand the feelings and defenses many parents bring to the school as an institution and to the teacher as an authority figure. But many lower income parents have childrearing practices that differ from those of the middle class. The kindergarten teachers must recognize the differences in the life-styles of low-income parents and come to terms with these differences in a way that will be mutually helpful.

There is a need for real openness in working with all parents. Margaret Mead imaginatively proposes a new tack for teachers to take:

> *Today we need to create an educational style which will provide for continuity and openness even within rapid change. Essentially this means an educational style in which members of different gen-*

erations are involved in the process of learning. One way of assuring this is through a kind of education in which new things are taught to mothers and young children together.[5]

She also urges more productive use of the wisdom and experience of the grandparents, the parent substitute for children in many slum areas. The more imaginative, productive use we as educators can make of the children's families, the more effective our teaching will be. Families need to be cast in the role of sharing in their children's education. When teachers are involved in the difficult business of teaching a somewhat different code of values and behavior than that of the home, every effort must be made to include the family in the process. Otherwise, children from urban and rural slums may be done the added disservice of being threatened with losing their feelings of oneness with their families.

The kindergarten teacher does have an expertness in child development and curriculum, and many parents want to know—in digestible bite-sizes—more about how children learn and develop.

The teacher who raises various aspects of her curriculum for discussion will find many active supporters and resource persons among her class parents. The more that parents are included in the school program, the more involved they are likely to become—and, consequently, more carryover between home and school will exist. If the combined force of the parents and the community does not support the changes a school system must make, it is doomed to failure.

To develop a good school-home relationship, the teacher needs to have real dialogues about the curriculum with parents. She must develop new ways of finding out the parents' concerns and feelings about the school. The most important school contacts are developed by teachers who share educational issues instead of educational pat answers and techniques with parents. These are teachers who seriously share with parents some of the ideas they are testing in the classroom—teachers who help parents see that there is no "one way" in education, but carefully designed trial-and-error programing interspersed with reliable but not immutable approaches. In other words, the parent-teacher encounters can help parents view the school as a center of inquiry. They have to understand the school's goals in order to be a critically constructive force in education.

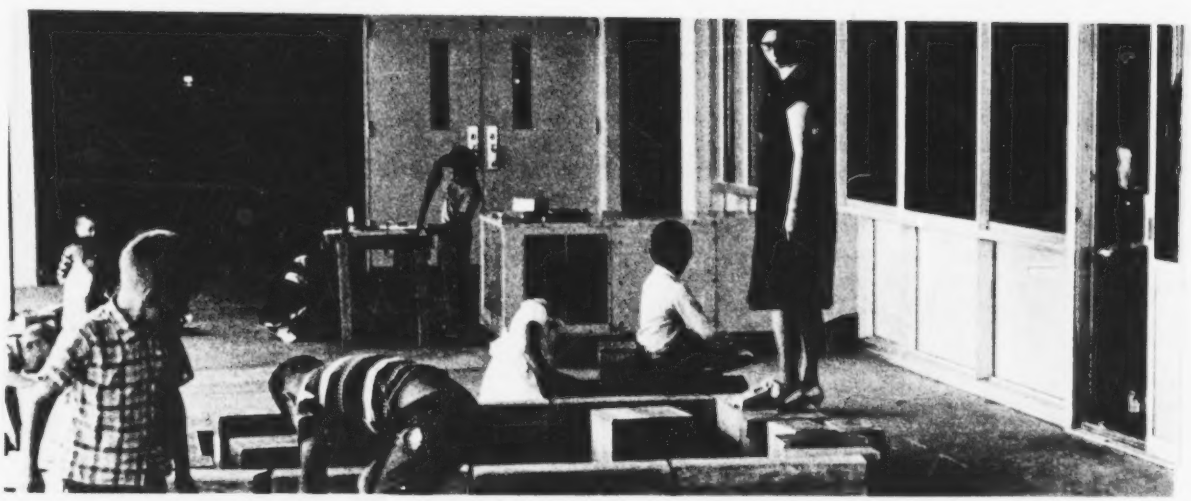
Summary

This chapter has included the human relations skills the kindergarten teacher needs to develop and has shown that her job has taken on a new complexity. She no longer has to try to be all things to all children, but she does have the challenge of integrating needed help from many sources.

The partners described in this chapter de-

[5] Mead, Margaret. "The Future as the Basis for Establishing a Shared Culture." *Daedalus* 94: 151; Winter 1965.

rive their knowledge in large part from the behavioral sciences. It may be that, in the service of balance, tomorrow's schools will include, additionally, partners whose knowledge stems from the humanities. Just as some campuses now have poets and writers in residence, future schools may be able to facilitate working contact between teachers and humanists. At present, this is a dream, but the likelihood is that the kindergarten teacher will find herself negotiating an increasingly complex set of relationships. If she values her own contribution, and realistically acknowledges the potential as well as the limits of partnership, her teaching can move into a new dimension.



A LIVING-LEARNING PHYSICAL ENVIRONMENT FOR KINDERGARTEN CHILDREN

IN CONCEPT, a good kindergarten living-learning experience represents a compilation of family, community, and professional resources that contribute to the child's total development and results from the efforts of a competent and sympathetic professional and paraprofessional staff, which is supported by a physical environment that reflects program needs and promotes instructional efforts.

Community and Neighborhood Concept

Kindergarten is the first formal educational experience for most children, their first taste of the world beyond family and home. To be of real assistance during this transitional period, the physical location of the kindergarten center—its accessibility within the community for children and parents—is critical. Effective programs for the individual child at such a center rely heavily on his parents' active interest and frequent attendance. In areas where the working parent has little leisure time or physical energy to devote to the child or where public transportation is inconvenient or expensive, the kindergarten must be located within the residential community it serves.

The importance of the kindergarten center

will be magnified many times over for both parents and children if it is both convenient and vitally involved in neighborhood life. It should be within easy walking distance for most families and provide for safe delivery of the children by private and public transportation. Thus, the kindergarten might be housed within the elementary school complex that serves the local neighborhood. If so, it should be in a connected pavilion or separate wing of the school.

It should be visually and aesthetically unique and identified by the young child it serves as "mine." A homelike, informal setting with activities organized around centers of interest provides a wholesome climate for living-learning experiences. Outdoor play space must be isolated from street noises, traffic hazards, and the exuberant roughhousing of older youngsters.

A well-rounded kindergarten facility not only will accommodate daily living-learning experiences for the child but will also provide him and his family with an area for welfare and psychological counseling when needed and with the educational guidance and social services that stimulate and improve family understanding, mutual respect, and unity. Here again, a complex and interrelated program is well served in a single structure, where the environment is specifically designed to facilitate it and where the scale is not intimidating to the child or the atmosphere institutionally forbidding to the parent.

Thus, the site of the living-learning center must be well situated and easily accessible to the families of the children. Adequate space and quality facilities, equipment, and materials are also essential ingredients of the physical environment.

Special Environmental Considerations

A good learning environment has an aesthetically pleasing atmosphere, one that gives its occupants the inherent satisfaction that results from a good balance of color, light, and space. Proper attention to detail during the planning stage will create an attractive and functional environment, one that will aid the child's development of independence, promote good health patterns, and provide enjoyment.

Space should be organized to permit full-time supervision of learning activities without distraction. Large, open areas with varied floor levels and ceiling heights would provide the visual separation necessary for quiet activity, as well as large-group and noisy activity within the same space. Such architectural treatment also breaks up the monotony of "institutional" or "sterile" geometrically balanced space.

Noise control is a major factor to consider in planning the environment. Children will be simultaneously involved in a variety of noisy activities—such as carpentry, block building, and music making; therefore, acoustical treatment of wall, ceiling, and floor surfaces is an imperative. Since most of the noise originates on the floor, distractions from

this source can be reduced with extensive use of noise-deadening materials.

All enclosed space and its furniture and equipment should be at the kindergartner's eye-level. Facilities providing easy access to equipment, furniture, and materials encourage his autonomy and independence.

Not only should most walls be movable, but all space in the area should be expandable and convertible. Although the needs of the child change infrequently, the methods used in meeting these needs will change with experience, hence the need for adjustable space.

Since the floor is the site of much of the learning activity, it should be warm, clean, and free from drafts. Air that can be either cooled or heated and adequate air ventilation are essential. Individually controlled room temperature is also desirable, and the controls should be at the child's eye-level.

Balanced illumination designed for the task should come from artificial, not window-light, sources. The light intensity should be variable, particularly for the control of glare. To blend the enclosed space with the outside requires light-permissive window materials, but natural sunlight must also be controlled in some fashion. Windows should frame an aesthetic setting where children can view and teachers can supervise outside learning and play activity. Attention to such detail as the height of the windowsills should not be overlooked. The arrangement and proportioning of windows is also important.

A variety of wall textures with colors of various hues or intensity provides a pleasant setting conducive to the living-learning process.

Safety and cleanliness must also be considered in the design, of course. Stairways should be avoided; if major changes in elevation are necessary, ramps with a nonskid surface may be used. Also, materials should be easy to clean and maintain.

Space Requirements

A careful study of the factors involved in the kindergarten living-learning experience is needed to determine how the space can be used in the most functional manner. The time spent in this area by its occupants, the extent of parent participation, and the nature of learning activities are just a few considerations.

Just as having too many objects to choose from may confuse or overwhelm the child, so too is the child's behavior affected by too much or too little space. The proper balance between functional space and learning activities is essential. Although many variables must be considered in determining space needs, the planners should recognize that several different types of learning activities will occur simultaneously and some of the same space can be used for several different activities.

The designer should first observe the learning experiences in a kindergarten program and then relate these activities to the organization of space.

The relationships or interactions of the kindergartners are the most significant environmental considerations. A learning environment with good, functional relationships should enhance good interaction among the children, should encourage the children to reach maximum achievement, should allow the children and the staff to respond immediately to needs and situations, and should ensure that the space creates a comfortable, stimulating, and pleasing atmosphere. Space organized around carefully identified and functional interrelationships helps eliminate many traffic problems, reduces noise distraction and discipline problems, and permits maximum supervision without the adult responsibility being obvious to the children. Space arrangement should encourage movement from one center of interest to another without delay or distraction.

Relationships between centers of interest, such as housekeeping to block building, should be a considered factor. It may be desirable to group noisy activities within one area and locate quiet, contemplative interests in another area away from possible distraction and interruption.

A blending of the inside with the out-of-doors not only establishes an optimum aesthetic setting where all can appreciate, enjoy, and respond to the outside world but also permits simultaneous indoor-outdoor supervision by the staff. A direct egress from the enclosed area to the outside one is imperative.

All facilities should be located on the ground floor and away from that of the older children. If the complex must be housed in the same building with older children, isolation of kindergarten learning activities is a minimum necessity and separate entrances and toilet facilities a must. Toilet facilities should be easily accessible from both indoors and outdoors and designed so that the child can use them himself. The kindergarten area should also have wash basins with running water.

Nature and Scope of Space

Within the kindergarten living-learning space, the atmosphere should be relaxed and homelike. The space available and its organization should inspire, please, and satisfy its occupants. Thought must be given to the im-

pact of the environment upon the child because he is quick to respond to conditions affecting his physical, psychological, and mental processes. The environment must be child-oriented. We must recognize the influence of space and color, texture and light on the child's attitude and so manipulate them to provide a more meaningful environment that responds to his needs.

The living-learning environment should provide versatility, adaptability, and accessibility if it is to motivate the child, yet inspire, please, and satisfy all who use the facility.

Versatility refers to the spatial and environmental variety inherent in all good architecture. Variations in scale, volume, and texture not only guide attitudes but channel enthusiasm along appropriate paths. Thus, the young child is made aware of and responds to these variations. He feels free to skip and laugh in these permissive open spaces where floors respond to the beat of the activity, yet he is quick to adjust to the quiet and contemplative activities of individuals and small clusters of children.

The ever-changing needs and activities of daily kindergarten routine necessitate that the site and the building, as well as the furniture and equipment, be designed to permit activities to expand, shrink, disappear completely, or even move outdoors. Carts, cabinets, low bookcases, work tables, and painting easels should all be a part of a portable setting that can take on new dimensions in meeting new demands.

Space, equipment, and materials should be accessible, so arranged to invite their use, sparking interest and curiosity, yet never frustrating play by being overly complicated, in bad repair, or simply out of reach. Placing too many objects or toys in one location is never encouraged, since it tends to overwhelm rather than stimulate the child. The supply of materials and equipment can be supplemented when a treasured object is broken, when a similar object is needed to maintain the interest level, or when the present supply has become overused and the group has tired of it. In essence, independent, self-stimulated work can only be brought about if the children are able to reach the object of their choice and to begin their activity spontaneously.

The overall space layout should allow for simultaneous indoor-outdoor play so the teacher can easily supervise groups in both areas at the same time. The outdoor living area surfaces should be varied in texture, open to both sun and shade, yet never flat, obvious, or dull to the child. A beautiful site that preserves and makes good use of the natural terrain provides a superb setting for learning and allows active play involving a variety of movements. In fact, some objectives of the learning program can be achieved only in the outdoor setting. Such activity encourages desirable social interaction, helps to refine coordinated movements, aids in fostering the decision-making process, and teaches a child many things about nature and life.

Children at this age level are active, vigorous, and curious, so space—lots of it—is needed for freedom of movement and for the rough-and-tumble activity of kindergartners. According to their preference, children should be able to gather in small groups of three to five or as a whole. There must be enough space to create a relaxed, pleasant, friendly, and happy atmosphere for all their many and varied activities. At the same time the staff also needs space for conferences, storage of records, and desk work. Cupboard space and shelving must be provided to make materials easily accessible. A kitchen or cooking area and running water are essentials.

Accommodation of Learning Activities

The design and organization of space depends on what planned and responsive learning activities are anticipated, and their identification should serve as justification for the suggested space requirements; for the program interrelationships; and for the maximum use of the furniture, equipment, and materials.

Firsthand, direct experiences are essential because the child is still integrating and developing coordination between mind, mood, muscles, and senses. These activities require that materials and equipment be easily manipulated, organized, and reorganized in endless ways as the child works alone, beside others, and with others. To encourage his natural curiosity, expand his knowledge, and refine his skills, the space is usually arranged in centers of interest—with the furniture, equipment, and materials readily available on his own terms. When the child is free and the teacher is open, each has a way of bringing together ideas, materials, and equipment with thrilling ingenuity, regardless of the adult design.

The child in a kindergarten living-learning environment should not have formalized instruction. What he needs is an environment rich with flexible, sturdy equipment and unstructured materials appropriate for his social, emotional, physical, and intellectual development. Each child must be able to interact spontaneously with peers and adults alike. The space should, therefore, motivate learning activity, encourage children to proceed from one interest to another, and foster independent and small-group participation.

Since much of the learning activity is meant to teach the child how to observe, experiment, imagine, and conceptualize, all activities, as well as material and equipment, must be on the level of the child. Within the kindergarten complex, adults should have the feeling that this is a child's world; one not merely an extension of the child's homelife, but a place where manipulative objects are scaled to his size.

The outdoors is an excellent place for the kindergartner to learn how to coordinate eyes, hands, and feet; strengthen abdominal and back muscles; and develop the fine muscles. Children are in constant motion—continually rolling, lifting, pushing, climbing,

pulling, testing, balancing, falling, and digging—all of which require outdoor space. In addition, the outdoors can promote a child's initial understanding of life through the growing of plants and caring for animals.

Certain activities permit multipurpose use of space. Although multiuse is a possibility, the nature of kindergarten learning activities is such that most facilities must be organized to accommodate specific activities on a spontaneous basis. Large-group activities—music, storytelling, and meal or snack time—occupy only a small portion of the daily schedule. Even so, space should be readily available to bring the entire group together at a moment's notice. Administrative-type support activities involving health needs, parent-staff consultation, psychiatric testing, and rest times are necessary to a successful and well-rounded program and require separate and isolated space.

Centers of Interest

In every kindergarten, space must be provided for individual activities as well as for those of groups. Arranging centers of interest allows the child to learn more about himself and the people around him and to develop his innate curiosity freely, without obvious adult authority or restriction. Such centers of interest can include areas for housekeeping, quiet activities, block building, artistic self-expression, total-group activities, outdoor play, and self-directed learning centers. A brief description of each follows.

Housekeeping. Kindergartners are great imitators of the adult world. Therefore, the equipment in the housekeeping area should approximate the surroundings of the average home. One essential element is water. The washing of dishes and possibly small articles of clothing can provide not only an instructive period, but a relaxed and enjoyable one as well. A small dishpan set into a simple opening of a small box is all that is necessary. Other basic elements include dishes, cooking utensils, mops, brooms, ironing board and iron, dolls, and child-sized furniture—tables, chairs, beds, a refrigerator, and a stove. Some briefcases and men's ties, hats, and shoes should be included to substantiate the male influence in the home. Other dress-up clothing can be brought into the play area from a central chest or storage unit, if necessary. Since these role-playing activities produce noise, acoustical and durable floor covering is a must.

Quiet activities. Quiet time can be a time for group study; a time for rest, with soft, peaceful music playing; or a time when the child browses through books of his own choice. Other activities—listening to records, experimenting with tape recorders, watching slides or filmstrips—can be incorporated into this same quiet-time area by using screens or movable shelving units. Essential equipment for this center should include a good record player (preferably stereo), a simple-to-manipulate but high-quality tape recorder, a record collection of both children's and classi-

cal subjects, and a library on a diversity of subjects supplemented with books borrowed from a public library. A slide projector, movie projector, and screen encourage additional experience and motivation activities. Because this is a time of quiet experience and exploration, the area should be away from the usual centers of noisy activity, perhaps in a corner. Warm, soft floor covering could provide a comfortable area and extra acoustical qualities, as well.

A large trunk similar to a pirate's treasure chest could be used to store dress-up clothes. After hearing a story, a few of the more outgoing children may wish to migrate outside of this quiet area and dramatize the main events of the story for the benefit of the others. The clothes could also be used to portray the persons that predominate in the child's life—such as mother, father, siblings, community members—and could be carried into other interest centers, such as block building or housekeeping, to provide additional role-playing situations. Dramatic play is invaluable in the daily activity of a kindergartner. It allows him to release aggressive or socially unacceptable feelings in an acceptable manner, since it is just a "pretend" situation. Dramatic play may be used in not just one but many centers of interest.

Block building. Block-building activities require sufficient open space with room for expansion away from regular group activities, in case the project under way develops into a more complex one. For example, the children may want to expand their make-believe highway to include a nearby "metropolis," adding more buildings, houses, and shops. Here again, dramatic play can unfold easily as the children begin to place themselves into the various roles suggested by these activities.

Low, movable shelving units could be used not only to delineate the area but to provide easy accessibility and storage by the child as well, with just minimum assistance from the teacher and aides. Well-sanded, shellacked blocks of good hardwood are essential, with numerous, extra-large, flat boards for expansion projects. Small but sturdy wooden dolls, cars, and trucks are also needed.

Artistic self-expression. The arts and crafts area should not have distracting furniture or fixtures. A large space with broad views of the natural landscape is an ideal setting in which to encourage the child's innate creativity. Some art enthusiasts suggest the use of easels and special easel brushes for kindergarten. However, large sheets of paper for individual painting sessions or perhaps a mural-type roll of paper placed on the floor for a joint art undertaking provide much more freedom of action. Regular enamel brushes (1" to 1 ½") facilitate the child's manipulation, since small-muscle development has not progressed too far at this stage. Naturally, the floor should be hard surfaced and impervious to paint, clay, paste, and glue, or it should be protected with large sheets of plastic or canvas.

A polyvinyl-acetate medium produces easier painting with better results than many lower grade temperas and watercolors. The child should be allowed a free choice of materials at some time in the art period and be permitted to work with clay, scissors, construction paper, paste, glue, finger paint, string, yarn, or bits of metals. Equipment and materials for expression in woodworking should also be placed here. Children could saw, hammer and nail, design tack mosaics, and then complete their productions with paint or enamel.

Water is needed here for finger painting, watercolor, tempera, chalk paintings, and other art media. All materials should be easily accessible to the child and just as easily stored away. Not to be omitted in the arts-and-crafts program is a convenient indoor-outdoor access, because the outside offers more freedom to the child and may also produce a more relaxed environment in which to develop creativity.

Total-group activities. For total-group activities, such as rhythms and exercises, a good acoustical floor covering not only contributes to a relaxed atmosphere but also reduces the noise level. Good rhythm band instruments are essential to produce the tonal quality necessary for music appreciation. A piano or an autoharp could also be included in basic music equipment.

Snack or lunch time activities in a clean and pleasant area encourage good eating habits. Tables and chairs should accommodate the small child comfortably. Use of disposable plates, cups, and eating utensils speeds up the cleaning-up process and avoids many problems with local health department regulations. The children can make placemats and table covers during craft activities time and find pleasure in seeing their products used at snack time. The mats and covers will also provide a colorful accent for the meal.

Outdoor play. Outdoor play should be more than the traditional "recess" period. It should, in fact, be an extension of indoor activity, since every indoor work-and-play experience can be equally appropriate, and perhaps even more effective, outdoors. The physical plant should allow easy access from indoors to outdoors and should also enable

the teacher to supervise both areas simultaneously.

Although the outdoor equipment should be safe and durable, an equal emphasis should be placed on simplicity. A simple, plain object stimulates much more creative expression and imaginative interpretation than one that only offers a dull, repetitive experience because of its elaborate design. Designing the outdoor area as a playscape rather than a collection of isolated, single-use equipment builds a far more inviting atmosphere, one where freedom of movement, the challenge to explore, and natural exuberance are encouraged. The varied use of hard-surfaced materials with perhaps one or two sheltered or shady spots further enhances the movement of learning equipment to the outside.

Simple arrangements can be made for water play with metal tubs or inexpensive, plastic wading pools. Sandboxes can be quite varied. Elaborate structures of molded concrete or redwood or simple ones from semi-buried tractor tires all have the same purpose —to stimulate creativity and provide relaxation. Jello molds, sieves, sifters, and a variety of plastic containers all add to the fun and enjoyment.

Special areas to observe living creatures as well as to develop interest in growing things should be provided. Modestly constructed, simple-to-clean cages are all that are necessary for observation and display of school pets. Small areas near a water supply can be set aside for gardens. These areas should be away from the usual play area so that the noise does not frighten the animals and the gardens are not trampled upon by accident.

Self-directed learning centers. Within the learning center lies the real "meat" of the kindergarten program. The various "tools for learning" should be provided in a subtle, unstructured manner. This center is an area for experimentation and exploration by the self-centered, self-motivated, self-directed child who learns without formalized instruction. Picture dominoes, letter symbols, number symbols that demonstrate a one-to-one concept, puzzles, magnets, felt, and chalkboards present opportunities for development of eye–hand coordination, shape–size discrimination, greater motor control, and a general increase in perceptual skills. Tracing geometric forms, experimenting with thermometers, balancing objects on scales, reflecting light through prisms, and manipulating shapes and sizes of spheres are just a few of the processes designed to "teach." A water supply in this area can be used to help the child develop a concept of weights and measures and can allow opportunities for flotation experiments. Here the child directs himself; the teacher and aides only guide his individual learning approach.

Gradually, by experimenting with varied materials the child becomes adept at arranging letters to form familiar words, perhaps even his own name; placing number symbols to make an arithmetic problem; and other ac-

tivities that indicate he has transferred a mere "plaything" into a meaningful and worthwhile learning experience.

The general scheme of the room should incorporate space for the "interest" objects that children are urged to bring to school for the discussion and observation of the other children. These objects also give the teacher a clue to the child's interests and thereby help her in planning the curriculum.

Furniture, Equipment, and Materials

Furniture and equipment can make a great contribution to the educational process and should be—

- Compatible with the proposed learning activities.
- Complete, safe, and practical.
- Efficient in educational utility.
- Selected for multiple uses.
- Aesthetically satisfying.
- Durable and of high quality.

A trap to avoid in selecting furniture and equipment is that of buying "oversophisticated" materials. Only simple, easily manipulated pieces that stimulate the imagination and offer combined use should be acquired. There is no reason why children cannot use blocks for dramatic play, as well as for building activities.

Having stackable, portable, or movable-type equipment facilitates its organization and use, promotes good housekeeping, and increases the flexibility of room space. A portable cabinet can hold books or toys and also serve as a temporary and partial room divider, a visual barrier, or an identifiable area for specific interests. Most pieces of furniture and equipment can serve multiple uses.

The child's participation is greatly enhanced when all furniture and equipment is designed and scaled to his size. Tackboard and chalkboard should be installed low enough for children to see their own work. Also, the children should be able to reach shelving and toy storage cabinets. If the kindergarten has a minimum of furniture and a maximum of emphasis on the child's participation, it will help develop creativity and motivate but not confuse or overwhelm him.

Equipment should be colorful and attractive, suitable for individual and group activity, safe, stable, and free from sharp corners and from danger of splintering. The following items should be included:

- Stackable tables and chairs
- Indoor and outdoor storage units
- Individual lockers
- Climbing apparatus
- Swing—canvas bucket seat
- Balls—rubber, various sizes
- Wagons—30″ and 36″ box
- Tricycles—16″ and 20″ ball-bearing
- Blocks—hardwood, well-sanded and shellacked
- Pine boards—sanded and water resistant
- Accessory toys—people, animals
- Playhouse and furnishings
- Dress-up clothing
- Gardening tools
- Water play equipment
- Sandbox and sandbox toys
- Rhythm instruments

- Materials for measurement—liquid measurer, measuring sticks, scales
- Projection equipment—films, filmstrips, slides, screen, projectors
- Still pictures
- Sound equipment—tape recorder, record player
- Books for young children
- Box of sensory materials—fragrance, texture, weight, sound
- Workbench, sawhorses, tools
- Soft wood for construction, nails
- Paint, paper, brushes, sponges
- Modeling clay
- Paste
- Scissors
- Puzzles
- Science equipment
- Terrarium, aquarium, cages
- Teacher's desk
- File cabinet with lock
- Full-length mirror

Summary

The living-learning experience for the kindergartner requires the right staff—particularly teachers—and the right ideas or program. If these people and ideas are to reach their full potential, then the right physical environment must also be available.

The physical environment or facilities should motivate the learning activity, encourage the child to move from one interest center to another, enhance total-group activities with a maximum of involvement and interest, and foster self-directed experiences. The space must be flexible in use, adaptable to change, and organized in an uncluttered, attractive manner.

The kindergarten facility—including space for family, community, and staff use in the development of the learning experience for the young child's benefit—should be organized with simplicity to encourage natural curiosity, invite creativity, and promote the development of basic skills. After all, the main purpose of the physical environment is to accommodate the people and living-learning programs. What happens to these people makes the difference!

CRITERIA FOR KINDERGARTEN EDUCATION

WHEN YOU VISIT a kindergarten, guard against being overly impressed by a large, well-equipped, orderly, beautiful, homey classroom and the quiet, well-oiled smoothness of the program. On the other hand, do not expect disorder, helter-skelter running about of the children, disarray, shouting, barrenness, and ugliness. The kindergarten classroom reflects the program and the relationships of the teacher and children.

The bulletin boards generally are used by children to share their work and interests with others. At times the teacher may use a display to arouse interest, which is withdrawn if it fails to reach the children or when it has served its purpose, regardless of how much it added to the decor. You will find many evidences of the child's world scattered around the room—picture books, treasured objects brought from home to share with others, nature specimens, pictures, living things—both animals and plants. There will be evidence of the child's learning—paintings; clay and craft objects; puzzles; words and numbers used in meaningful situations; observation and experimentation posts, which may range from a thermometer outside the window to measuring tools and a bucket of water; play equipment, including wheel toys, all kinds of blocks, housekeeping, and

dramatization and dress-up materials.

If you are fortunate enough to be present when the kindergarten is in session, you would not expect to always find all the children seated at tables or on the floor being "talked to." You might have to "search" for the teacher, who may be at a table doing direct teaching with one, two, three, or four children, on the floor as a consultant to a crew of block builders, or at the workbench supporting a piece of lumber that a child wants to saw.

The children will be equally involved with individual tasks, participating in a small-group project, or engaged in listening, singing, or conversing in a larger group. You will find the hum that comes from human interaction—movement that is purposeful. You might observe an accident—the paint pot is overturned, a thumb gets in the way of the hammer, the block tower comes down with a thud. Children react as do all humans; they must relieve the tension with tears, in an excited high-pitched word or shout, or even by striking out at someone. The teacher responds with warm understanding, guiding the child to accept the inevitable but helping him to learn from the experience, giving support for the good points, and being positive in criticism.

If you remain for an entire session, you will see how a rhythm of activity is provided —the child moving from active to quiet, from concentration to a less strenuous intellectual task. You will observe how the child is becoming increasingly independent and self-sufficient, taking on responsibility for his own learning. The teacher suggests, asks questions, and provides some additional material rather than give the answer, perform the task, or direct; the child is familiar with the tools of learning in the classroom and their location and is free to make use of them as he needs them and to seek out help from other children or adults.

You will hear much talk, since the teacher is encouraging the children to increase their vocabularies and gain greater facility with the language by using it. The teacher will provide time during each day when stories and poems will be read and told, again for language and concept development.

Do not expect to find all of the following statements true of any one kindergarten situation. However, they will serve as benchmarks of a good learning situation appropriate for the kindergarten-age child:

—A good kindergarten is a busy, happy place.

—The area is sufficient to allow for free movement, at least 50 square feet of indoor and 100 square feet of outdoor space per child.

—The furniture and equipment are arranged to provide large, open areas for big-muscle activity.

—Equipment and materials are varied and adequate, of good quality, and in good condition.

—Children chatter and laugh spontaneously.

—Children move about freely but purpose-

fully, engaging in activities in which they are interested.

–Children are encouraged to complete one task before moving to another, with the teacher providing assistance if the child is not equal to the task.

–Children show evidence of growing self-confidence and of achieving a realistic balance between dependence and independence.

–The teacher in charge has had special preparation in early childhood education.

–The teacher responds warmly and supportively to children and parents.

–The teacher observes and nurtures each child's developmental qualities.

–Visitors are welcome but are not permitted to interfere with the ongoing program.

–Total-group activities are kept to a minimum.

–Direct teaching is used by the teacher with an individual or a very small group only when a skill is needed and the learner is ready.

–The program is planned to provide basic root learnings, but the schedule is flexible.

–Activities and techniques vary, and their use is based on the needs of the learner.

–The curriculum builds on the challenging and significant contacts that a young child has with his world.

–Play is recognized as the child's way of learning.

–The children's activities involve all their senses—seeing, hearing, feeling, smelling, and tasting.

–Close cooperation of school and home in guiding the child's physical, mental, and social development is maintained by visits, conferences, and telephone calls.

–Health and welfare services are available to the teacher and children.

–The pupil-teacher ratio does not exceed 20 children to 1 teacher plus auxiliary helpers.

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